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MARCH, 1918

EQUAL PAY FOR EQUAL WORK

John Jones earned good wages from a firm of outfitters by braiding military tunics. He fell ill and was allowed by the firm to continue his work in his own home. He taught his wife his trade, and as his illness became gradually more severe she did more and more of the work until presently she did it all. But as long as he lived it was taken to the firm as his work and paid for accordingly.

When, however, it became quite clear, John Jones being dead and buried, that it could not be his work, Mrs. John Jones was obliged to own that it was hers, and the price paid for it by the firm was immediately reduced to two-thirds of the amount paid when it was supposed to be her husband's.

Those who uphold the principle "Equal pay for equal work" are fighting against this differentiation against women's rate of wages. They ask why the firm was prepared to pay John Jones a certain sum for braiding a tunic? The reply is obvious: because a braided tunic is worth more and sells for more than an unbraided tunic. The tunic when braided sells for an equal sum whether the braid has been sewn on by John or Jane, on the supposition naturally that Jane's sewing is equal to John's. The paying of Jane at a substantially lower rate than John is undercutting all the men in the trade and is therefore injurious to their interests. It is sweating the woman worker and is therefore injurious to women in general, and exercises what Miss Rathbone in her interesting article in the Economic Journal for March, 1917, calls "a downward pull" on their wages.

Miss Rathbone calls the formula "equal wages for equal

work" vague and ill-defined. She says that in accepting it feminists are falling into a very palpable trap set for them by the men's trade unions. With all respect I should demur to both these statements. By "equal wages for equal work" no one means that women who are less valuable as producers should be paid the same as men who are more valuable. In reading Miss Rathbone's article I cannot help feeling that she too much disregards the tremendously depressing effect on women's wages of the pre-war trade union rules, combined with social use and wont, which kept women out of nearly all the skilled industries. This policy obviously cut off a great volume of the demand for women's labour which would exist if these barriers could be broken down. It is quite true to say that, although the doctrine of demand and supply has fallen of late years into unpopularity, it is nevertheless a fact that if demand for a particular class of labour is either destroyed or very much restricted, "a downward pull" on wages is called into existence for the whole class.

Let it be supposed that trade union rules, plus employers' prejudices and social custom, prevented natives of the Isle of Wight from being allowed to engage in skilled industry: you would at once call into existence a tremendously depressing effect upon the wages of all the islanders whether skilled or unskilled. The unskilled trades open to them would be overcrowded, and competition among the workers might well force down wages to less than subsistence level. It had done so in the case of large masses of women before the war. In 1912, according to a table prepared by Mr. Sidney Webb for the Fabian Women, the average wages for adult manual working women was only 10*s.* 10½*d.* a week. This, it must be remembered, was the average, but there were many working for less than this, and the Committee of the Queen's Work for Women Fund, started at the beginning of the war, reported that "many working women are normally in receipt of wages *below subsistence level.*" The evil effects of such a state of things can hardly be exaggerated. It means physical degeneracy, not for one sex only, premature old age for women, impossibility of organising women's labour, the stamping out of any intelligent effort to acquire industrial training and a high degree of industrial efficiency.

The idea formerly very widely entertained that women were incapable of skilled work has been shattered by experience since the outbreak of the war; and I venture to think Miss Rathbone has not given sufficient weight to this experience. She assumes too much that women are always industrially less advantageous

to their employers than men and that their lower wages to a large extent merely reflect this lower value. But among many employers who have spoken on this subject during the last three years I may quote Sir William Beardmore, the well-known engineer, and President in 1916 of the Iron and Steel Institute. In his presidential address he spoke of the difficulty met with by employers in inducing workmen to utilise to the best advantage improved methods of manufacture evolved by experimental research; he said: "Early in the war it was found at Parkhead forge that the output from the respective machines was not so great as what the machines were designed for, and one of the workers was induced to do his best to obtain the most out of a machine. He very greatly increased his output, notwithstanding his predilection for trade union restrictions. When it was found that the demands of the Government for a greatly accelerated production of shells required the employment of girls in the projectile factory, owing to the scarcity of skilled workers, these girls in all cases produced more than double that by thoroughly trained mechanics—members of trade unions—working the same machines under the same conditions. In the turning of the shell body the actual output by girls, with the same machines and working under the same conditions and for an equal number of hours, was quite double that by trained mechanics. In the boring of shells the output also was quite double, and in the curving, waving, and finishing of shell cases quite 120 per cent. more than that of experienced mechanics" (*Manchester Guardian*, May 16th, 1916).

Here, therefore, you have a case in which women's work excelled men's work in productiveness by two to one or more. I always take care when I am speaking to women on this subject to warn them not to run away with the idea that either physically or mentally they excel men. What these figures do show is some part of the extent to which the whole atmosphere in which industry was carried on in this country before the war led to the deliberate restriction of output by the male workers.

Although Miss Rathbone complains of the expression "equal wages for equal work" as being vague and ill-defined, she herself gives an admirably clear and definite exposition of it on page 59, where she describes it (hypothetically, it is true, but not the less accurately) as a claim to secure for women a fair field of competition with men, their work being accepted or rejected on its merits, recognising that any permanent disadvantage that adheres to women workers as such should be allowed for by a *pro rata*

reduction in their standard rates. I believe nearly all feminists would be prepared to accept this definition. If, for instance, owing to a lower degree of physical strength it was found necessary to employ three women to do the work ordinarily done by two men, then the wages for the three women could reasonably be adjusted to balance this disadvantage. War experience, however, has stiffened the conviction of many feminists that a large proportion of supposed feminine disadvantages exist more in imagination than in reality. That a woman in the textile trade was paid at a lower rate than a man for the same work has, for instance, been accounted for, time out of mind, by saying that a woman was incapable of "tuning" or "setting" her machine. Very few of those who used this formula took the trouble to explain that women were never given the opportunity of learning how to tune or set a machine. It was looked upon as a law of nature that a man could set a machine and that a woman could not.

Given a free entry into skilled industries and the opportunities of training, the organisation of women either in men's trade unions or in trade unions of their own and political power to support their industrial claims, and I can see no reason why the principle of equal pay for equal work should not in the course of a few years find an almost universal acceptance. I have endeavoured to show that such differences as exist between Miss Rathbone and myself upon this principle are very much a question of words and not of facts. I do not claim in all cases identical wages for men and women. If the men are worth more let them receive more, or if the women are worth more (as they were in the Parkhead forge) let them receive more. The one chance of women being received into industry by the men already employed as comrades and fellow-workers, not as enemies and blacklegs, is in their standing for the principle, equal pay for equal work, or, as it is sometimes expressed, equal pay for equal results.

Some illustration of what organisation and co-operation can do in raising the wages of sweated women may be gathered from Miss Marie Harrison's recently published book, *The Dawn in Ireland*, where she shows, on pages 9 and 19, how the sweated knitters of Donegal, who formerly only received from the gombeen-men who controlled the whole industry 1*s*. 4*d*. a dozen for knitting socks and 1*d*. a pair for knitting gloves—a wage which was not paid in cash, but had to be taken out in goods in the gombeen-man's shop—are now through the aid of co-operation and organisation earning wages which average over £1 a week, and

in the case of exceptionally good workers go up to £1 10*s*., £2, or even £2 10*s*.

No one knows what women or anyone else can do until they have had an opportunity of learning how and trying. War experience has proved this; and I am convinced that the best chance of women preserving, after peace returns, the industrial freedom which the war has brought them lies in the earnestness and sincerity with which industrial women maintain the principle "equal pay for equal work."

An inquiry into Miss Rathbone's poser, "Why is a butler paid more than a parlourmaid even by feminists?" would be a very interesting excursion into economics and social fashion. I suggest that over and above the very restricted area of employment other than domestic service open to the parlourmaid, in distinction to that open to the butler, there is another reason in the undoubted fact that it is more *chic*, more fashionable, to have a butler than a parlourmaid, and people are willing to pay in hard cash and even in actual discomfort for this emblem of aristocracy and wealth. For the same reason they are willing to pay more for a 6-ft. footman than for a footman who is only 5 ft. 3 in., who may be not only as efficient, but more efficient than his big brother. There is one trade in which women receive higher wages than men for the same work. I am not going to reveal what it is; but I will say that I believe the employment of women in it is a fashion and denotes a superior social status on the part of the employer, for which they are willing to make a considerable payment.

As Miss Rathbone points out (page 64), the potentialities of women's labour are much better understood now by employers than they were before the war, and the desire of women to retain the industrial liberty they have gained since 1914 is certain to receive important support from this source, and the general public would undoubtedly resent the attempt to push women back into the industrial serfdom of the past.

The advocates of the principle of equal pay for equal work have an encouraging precedent in the successful stand which women doctors have made from the outset that they would not undersell the men in the profession. Whether as physicians or surgeons they have been quite determined on this point. Medical women working for the War Office since 1914 did not secure this position without a struggle, but I understand that the controversy is now settled in a satisfactory manner. The women controllers, for instance, in the W.A.A.C. receive payment corresponding to

that of a Colonel in the R.A.M.C., while other medical women doing full-time service are being paid £1 4*s.* a day with allowance for rations and uniform.

This is as it should be, and I have not heard either from the representatives of the women doctors or of the War Office that either of them found the claim of equal pay for equal work "vague or ill-defined."

MILLICENT G. FAWCETT

THE WOOL TRADE IN WAR TIME

SELF-DEPRECIATION is a recognised and cherished characteristic of the British nation and one which has undoubtedly assisted in building up the British character as we know it. But there are limits to its usefulness, for it tends to make us overlook some of our most valuable resources. Had we been more disposed to vaunt our assets, we might have started at a much earlier period forging a weapon, the use of which has been forced upon us by circumstances rather than adopted by choice, but which we are gradually realising will be, if not *the one* decisive factor, at any rate *one* of the decisive factors, in determining the issue of the war. For the economic weapon—the control exercised over the best markets of the world, and, what matters still more, over the main sources of raw materials—is more powerful and far-reaching in its effects than it is easy to grasp. Slowly but surely this weapon is being hammered into serviceable form; our plans are being thought out and put into operation, our resources examined and enumerated, our industries organised and directed. This is an even wider and harder task than the production of an adequate supply of munitions, for it involves every important trade in this country, and in addition our commercial relations with the whole of the world. Yet, under the pressure of circumstances, it has been undertaken and is proceeding to an extent hardly yet known to the general public. Sporadically, indeed, and not apparently in pursuance of any systematic plan, one trade, or branch of a trade, after another is being brought into line, now by this department and now by that one, as the urgency of the moment demands, until scarcely an industrial concern is left which has not felt what is sometimes described as the numbing influence of Government control, but what is really the bracing effect of considering each firm, each branch of a trade, each industry, not as an end in itself, but as part of a greater whole existing in order to render service to the community.

This change in outlook and organisation, which amounts in fact to a second industrial revolution, has taken place quietly and unobtrusively, except perhaps in the case of the munition industries; and the methods adopted, the results achieved, and the experience gained, are hardly known beyond the industries

concerned; yet they are of very great importance, not only to the industrial historian, but to the practical administrator attempting to solve similar problems in other trades. It is therefore proposed to describe briefly, for the enlightenment of all whom it may concern, the developments which conditions of war have brought about in one of the oldest and most famous of our industries, namely, that engaged in producing textile materials and knitted goods made wholly or partly of wool.

In order to appreciate the changes which have taken place, it will be useful briefly to describe the main facts about the industry. The many centuries during which woollen cloth has been woven in England have afforded opportunity for the development within the industry of an endless variety of organisation, brought about largely by the many different types of raw material used, and in consequence by the diversity and complexity of the processes for working them up. There are, to begin with, the two main branches of woollen and worsted manufacture, representing a difference in the treatment of the raw material from the initial stages and usually organised in a different way. A a rule the woollen manufacturer who cards the wool buys the raw material and sells the finished cloth, performing all the operations in his own mill, while worsted manufacture, in which wool is combed, is carried out in a large number of mills, each specialising in one particular process, though there are, of course, numerous exceptions in both branches.

Then, again, there is the extraordinary variety of material; nearly all countries contain sheep, and the wool of each possesses distinguishing characteristics, while, as an example of the diversity of wools grown in one country, it may be mentioned that, for the purposes of valuing the wool grown in the continent of Australia, it was necessary to draw up a price list containing 848 separate classes. In addition to working up wool, this trade also works up camel hair, goat hair, mohair, cashmere, alpaca, human hair, and other animal fibres of a similar nature, while the spun yarn is frequently mixed with cotton or silk before weaving or knitting.

Another complication is introduced by the fact that each branch of the trade has its own method of financing the manufacturer, and that here again there are always exceptions. The woollen manufacturer, the worsted spinner, and the worsted weaver usually own the material which they work up; the comber and the dyer do not. Raw wool, tops and yarns are usually paid for in cash after fourteen days, while the trade terms for cloth allow of three or six months' credit.

The main seat of the wool industry is in that small part of the West Riding of Yorkshire lying between the valleys of the Aire and of the Calder with its tributary the Colne, though there are firms, or groups of firms, usually specialising on some particular class of product, in several other parts of the United Kingdom. The flannel industry extends over the Pennines down to Rochdale and Oldham in Lancashire. The old-established and famous West of England cloth is made in scattered factories throughout Somerset and Gloucester, the largest number being perhaps found in and around Stroud, while the industry extends into Devon and Cornwall in the west, and into Wiltshire and Oxfordshire, famous for blankets, in the east. The carpet industry, which is the section of the trade requiring the most skill, brains, and artistic sense, is also mainly situated in this part of England, round Kidderminster; the other carpet mills being in Scotland and in the north of Ireland. There are a considerable number of woollen manufacturers and a few worsted spinners in Scotland, the most marked concentration being found in the border districts of Berwick, Selkirk, Roxburgh, and Dumfries, where there is also a considerable hosiery industry. Scattered over Wales are a large number of small flannel mills, many without any mechanical power and employing only a handful of workers. The hosiery industry is concentrated largely in the Midlands, though over a larger area than the West Riding cloth industry, since it stretches from Derby and Nottingham to Leicester and Wigston. A general idea of the distribution of the industry may be seen from the following table showing the approximate percentage of workers, firms, and machinery in each area :—

Percentage Proportion of Labour, Firms and Machinery in Wool Textile Trade (Dyeing and Finishing not included).

(*The figures relate to August 30th*, 1917, *and are approximate only*).

District.	Workers employed.	Firms.	Woollen Spindles.	Worsted Spindles.	Looms.
Yorkshire	73·5	72·1	65·8	92·3	73
Lancashire	4·6	4·3	9·3	0·1	6·8
Midlands	2·5	1·6	1·2	3·4	0·6
West of England ...	2·6	1·8	5·3	0·7	2·4
England Total ...	83·2	79·8	81·6	96·5	82·8
Wales	0·5	3·7	1·4	—	0·9
Scotland	9·3	11·5	14·4	2·7	9·6
Ireland	1·5	3·0	2·1	—	1·1
Carpet Trade	5·5	2·0	0·5	0·8	5·6
Total United Kingdom	100	100	100	100	100

It is difficult to say with any exactness how many persons are employed in the wool-using trades in the United Kingdom; there are probably about 400,000 employed in manufacture alone, to which must be added an unknown but considerable number of persons engaged in the collection, handling, and distribution of raw wool and of the semi-manufactured and manufactured products, including shepherds, transport workers, and shop assistants, as well as merchants, clerks, and agents of all kinds. The latest published detailed statistics about the persons employed in the trade are contained in the Census of Occupation of 1911, of which the volume for England and Wales is the only one issued at present. The information which follows, therefore, relates entirely to those countries, but later information affords reason for supposing that the proportions in Scotland are not very different, while the numbers in Ireland are small enough to be negligible. It must, however, be noted that there is no separate information available with regard to persons engaged in the dyeing and finishing of wool as distinct from cotton and other textiles, largely owing to the fact that many firms are engaged in dyeing both cotton and woollen goods; as the work in this trade is heavy a large proportion of adult men is employed, and their addition must tend somewhat to alter the proportion of adults and juveniles and of men and women. Of the 350,000 persons employed in the wool-using trades in England and Wales, three-quarters are in the woollen and worsted trades proper and about four-fifths of the remainder are in the hosiery trade. Dividing up the woollen and worsted trades again into their main processes, we find that weaving and its subsidiary processes occupy nearly one-half of all the workers and more than half of the women and girls; about one-third of all the workers and the same proportion of the women and girls are engaged in spinning and kindred occupations; the remainder are to be found in wool-sorting, carding and combing, and other subsidiary processes. Taken as a whole the wool-using trades must be considered largely a woman's trade, since 60 per cent. of the total number occupied in it are women, as compared with 30 per cent. of the total occupied population. The proportions vary, however, enormously in the different sections, from 73·5 per cent. in weaving and in the hosiery trade as a whole, and 64 per cent. in spinning, to 34 per cent. in carding and combing, and only 4 per cent. in wool-sorting. The nature of the work, which renders possible the employment of so large a number of women, is also favourable to the employment of young persons, and consequently we

that ten years ago more than one-fifth of all the workers were under 18 and that the proportion has increased, especially since the war. Sixty per cent. of the juvenile workers are employed in spinning where nearly half the workers are under 18. Although the half-time system does not prevail in Yorkshire as in Lancashire, many children enter the mills at 13; Bradford, however, in spite of the large number of worsted spinning mills which depend largely on juvenile labour has insisted on children remaining in school up to the age of 14, a provision which has however been relaxed during the war owing to the shortage of juvenile labour.

Some associations both of employers and workers existed before the war, but they could not be compared either in size or strength to those in the sister industry of cotton. The variety of organisation already described led naturally to a sectionalism which magnified the opposing interests near at hand and failed to recognise the common interests which lay below the surface. Thus one of the most marked features of the Wool Textile Trade was the suspicion and even the hostility, with which the different sections regarded each other, and consequently employers and workers alike were, and still are, to be found in a large number of independent societies, while many prefer to remain outside any form of organisation at all. For example, to an "Agreement made the 4th day of February, 1916, between the representatives of employers and workpeople engaged in the Worsted and Woollen Industries of the West Riding of Yorkshire for the purpose of dealing with the exceptional conditions arising out of the war," the signatures of 13 employers' and 18 workpeoples' representatives are attached; at a meeting held with Trade Unionists in October, 1916, 41 organisations in the West Riding were represented; an agreement relating to dyeing and finishing only was made in April, 1914, between four employers' associations and three trade unions, while a considerable number of dyers belonged to a fourth union which was not included.

In order fully to understand the measures taken to meet the war situation, it is necessary to realise also the position with regard to the raw material of the trade. The annual consumption in the United Kingdom of raw sheep's wool alone amounted to about 550 million pounds weight on an average in the five years preceding the war, to which there must be added about 75 million pounds weight of mohair, alpaca, etc., and of wool from imported sheep skins, and an estimated weight of 225 million pounds of woollen rags, shoddy, etc., in order to give an

idea of the total weight of raw material used. About 530 million pounds weight of wool and 120 million pounds weight of shoddy and rags are imported, while 90 million pounds weight of wool and the remainder of the shoddy and rags are home produced. Thus the industry is dependent on overseas supplies for more than three-quarters of its raw material; of this again, about one-half comes from the Antipodes, and the remainder chiefly from countries as far distant as South Africa, India, the River Plate, Chile and the Falkland Islands. It must also be noted in this connection that the British Empire produced before the war about 40 per cent. of the wool of the world, and normally requires less than half of this quantity for its own use.

Thus we see the Wool-using Industry before the war, a highly intricate organism deriving its infinite variety of supplies from the furthest corner of the world, working them up in an infinite variety of ways, into an infinite variety of finished products, of which one-half are sent out again to be worn in every country of the world. In order to achieve this result there are at work shepherds and shearers, carmen, dockers, sailors and every other kind of transport worker, combers, spinners, weavers, knitters, dyers and all other workers engaged in the process of manufacture, warehousemen, clerks, cashiers and shop assistants; while everywhere and at every stage there are merchants, agents, and brokers of every kind, usually assisting but sometimes also clogging the working of this huge and complicated machine. It is small wonder that in the past the separate parts of this organisation have failed to realise their unity, and that their conflicting interests have loomed far larger and absorbed far more energy than their common ones. A reduced clip and the resulting increase in the value of wool represents sheer loss to the grower whose flocks have died, sheer gain to the merchant whose warehouses now contain more wealth, and between these two extremes the laws of cause and effect, of supply and demand, apportion profit or loss to everyone engaged in the trade according to his own individual circumstances. What is meat for one merchant or manufacturer may be poison for his competitor, and the different sections of the trade seem to thrive at each other's expense. The weather in Australia, a presidential election in the United States, or even in the Argentine, a change in freights or in the rate of exchange, in fact, whatever happens in the world, is reflected in some way or other in the wool trade, and may make or mar the individuals engaged in it.

Now, what has been the effect of the war conditions on this

fascinating trade? It was at once obvious that the effect would be far-reaching and unprecedented, but it was some time before the main tendencies disentangled themselves from the mass of attendant circumstances. By now, however, it is possible to discern the direction of the chief currents which are setting in this as in other industries, and the fresh developments which will occur are not likely to alter the fundamental lines which have been already laid down. In every trade the stern logic of events has forced two fundamental facts upon the attention of even the most self-absorbed or dull-minded member of it; first, that his trade is one organisation whose many members are interdependent and cannot fight each other without injury to every one of them, and, second, that even his trade as a whole is not an end in itself, but exists in order to perform an essential service to the community. In the wool trade this new point of view has been driven home by the fact that the fortunes of the trade, instead of being directed by thousands of firms, each pursuing whatever course seemed best in its own interest, are now controlled by one Government Department, deciding each question with reference to the common interest. In what follows an attempt will be made to describe by what process this has been brought about.

When the thunderbolt of war fell out of a blue sky on to the wool trade at the opening of the 1914–15 season, its first effect was a sudden drop in all prices; for it seemed as though there must be a glut of wool, when neither German, Belgian, nor Northern French merchants and manufacturers could assist as usual in "lifting" the clip; but the more far-seeing members of the trade soon realised that soldiers require far more wool than civilians—some say four times as much—while, even before the war, a stimulating competition from the United States had been felt, as a result of the tariff revision which came into force in December, 1913 and placed raw wool upon the free list. A serious drought in Australia, resulting in the loss of one-fifth of the flocks, had a marked effect on the amount of wool produced in the world, and reduced the supply just when the demand was beginning to increase on a large scale. Consequently, from the early months of 1915 onwards wool prices began that startling climb which they have pursued almost without interruption ever since.

Meanwhile there was great activity in the West Riding and other woollen manufacturing districts. Clothing had to be provided not only for Kitchener's army, but for a large part of the

French forces as well, since almost the whole French wool manufacturing districts in the North-east of France were overrun by the enemy. We sent to France in 1915 eight times the quantity of woollen and worsted tissues normally sent there before the war, while our own army orders for clothing were between thirty and fifty times their pre-war size. There was a considerable demand, too, from that portion of the civilian population which was making war profits or earning a war bonus, and from other countries which could no longer obtain woollen goods from Germany and Austria. Consequently, the amount of raw wool retained in England during 1915 was two-thirds higher than the normal consumption; this huge quantity of wool was only available owing to the possibility of diverting to the United Kingdom the supplies usually sold to the Continent. It was indeed a golden time for the West Riding.

This trade boom, which was accentuated by a growing shortage of labour and by the rising prices of raw materials, began to make it difficult for the British and Allied Governments to satisfy their needs; for in order to induce sufficient manufacturers to accept contracts, they had to compete with the higher prices which the civilian trade was ready to pay. Thus patriotic firms, already on the contracts list, were willing to do the work at pre-war rates of profit, but they found it difficult to prevent their workpeople from going to more remunerative employment; other firms who were inexperienced in making this class of goods had a higher cost of production, and therefore appeared entitled to better prices, while the more unscrupulous ones either exacted war profits or devoted themselves entirely to the highly-remunerative civilian production. The old method of tendering was, in fact, out of date, since its advantages disappeared when the orders to be placed were larger than the tenders offered and competition among manufacturers had ceased to exist.

In order therefore to obtain sufficient supplies and to distribute both the burdens and the profits more equally, powers were obtained by the War Office to requisition the whole or any part of the output of a firm, and by this means to lay under equal contribution all firms able to supply Government needs. These powers were first used mainly in the hosiery trade, in which the supply question has always been acute owing to the specialisation of machinery and the unusually heavy type of garment required for army purposes.

The method of requisitioning, however, raises as many problems as it solves, and the Contracts Department was immediately

faced with the question of the price to be paid for the requisitioned goods. It was decided to adopt the principle, obviously fair and simple in theory, though very complex in its application, that the manufacturer should receive as the price of his goods the amount of his actual outlay together with a reasonable rate of profit based on pre-war standards. This principle is such an important one owing to the developments which it renders possible, that the form in which it is now enshrined in the Defence of the Realm Regulations deserves quotation in full :—

Regulation 2 B. It shall be lawful for the Admiralty or Army Council, or the Minister of Munitions, to take possession of any war material, food, forage, and stores of any description, and of any articles required for or in connection with the production thereof.

Where any goods, possession of which has been so taken, are required by the Admiralty or Army Council or the Minister of Munitions, the price to be paid in respect thereof shall, in default of agreement, be determined by the tribunal by which claims for compensation under these regulations are, in the absence of any express provision to the contrary, determined.

In determining such price regard need not be had to the market price, but shall be had :—

(*a*) If the goods are acquired from the grower or producer thereof, to the cost of production and to the rate of profit usually earned by him in respect of similar goods before the war, and to whether such rate of profit was unreasonable or excessive, and to any other circumstances of the case.

(*b*) If the goods are acquired from any person other than the grower or producer thereof, to the price paid by such person for the goods, and to whether such price was unreasonable or excessive, and to the rate of profit usually earned in respect of the sale of similar goods before the war, and to whether such rate or profit was unreasonable or excessive, and to any other circumstances of the case; so, however, that if the person from whom the goods are acquired himself acquired the goods otherwise than in the usual course of his business, no allowance, or an allowance at a reduced rate, on account of profit shall be made :

Provided that where by these regulations or any order made thereunder the sale of the goods at a price above any price fixed thereunder is prohibited, the price assessed under this regulation shall not exceed the price so fixed.

When applied to the wool textile trade this means that for each process and quality there has to be fixed a "conversion cost," ascertained in the first instance by an examination of the books of typical firms by expert accountants, and varied, if necessary, to meet the case of similar qualities and processes. But as soon as steps were taken to put this system into operation the absence of any firm basis on which to build up the conversion costs was found to be a serious difficulty. In the case of hosiery yarn, which was the first article to be dealt with in a comprehensive manner, it was agreed between the Department and the hosiery manufacturers to add a flat rate to the price of the combed wool

(tops) from which it was made in order to cover the cost of the spinning and the subsidiary processes; the different qualities of tops were divided into six price groups and the flat rate was slightly increased with the increasing price of tops. In this way the price paid for the finished article depended directly on the price of tops. Now, for practical purposes, it was obviously necessary in a changing market to take as the price of tops the fair price of the day on which the hosiery manufacturer placed his order with the spinner; but, since prices were always rising and never falling, the necessity of taking the market price of the day always resulted in giving the manufacturer an opportunity for making a further profit, by using tops purchased before that date. It was quite clear that the costing system could never be completely satisfactory until it could be built up on a fixed price for the raw material.

This need for controlling the raw material was further emphasised by the growing shortage of raw material already mentioned. In fact, difficulties had already arisen in obtaining sufficient supplies of the qualities of wool particularly needed for army requirements, especially colonial cross-bred and British wools. It was therefore decided in June, 1916, to purchase the whole of the British clip which was then beginning to be shorn. The price basis at which the wool was bought was fixed, after negotiations with the farmers, at 35 per cent. above the level of prices in July, 1914, equivalent to about a 60 per cent. increase on the decade before the war, but which resulted in most cases in a rather lower value than the farmers would probably have obtained had there been a free market. The wool was distributed direct to spinners and manufacturers to use for Government requirements, so far as it was suitable, at fixed rates based on the price paid for the wool; the remainder was sold for civilian use at a somewhat higher price level.

The purchase of the British clip was successful in achieving the two objects in view, namely, the safeguarding of supplies and the establishment of a firm price basis, so far as was possible in view of the size of the clip, which, however, provided less than half the Government requirements. In order completely to attain these objects, it was obviously necessary for the Government to own all essential supplies, and with this end in view a proposal was made to the Governments of Australia and New Zealand in the autumn of 1916 to purchase the cross-bred clips of the 1916–17 season. Owing, however, to the difficulty of discrimination in Australia between the growers of cross-bred and

merino wool, a counter-proposal was made by the Colonial Governments that the Imperial Government should purchase the whole of the Australasian clips which had not at that time (*i.e.*, November, 1916) passed the hammer at public auction. The Imperial Government agreed to purchase the wool at a price level 55 per cent. above that ruling in the season before the war through the agency of the Colonial Governments, who undertook the whole work of collection and valuation, etc. It was agreed that the wool should be paid for on appraisement and should be kept in the Colonies to be shipped under arrangements made by the Admiralty. Any profits which might be made on the sale of the wool not required for Government purposes was to be shared with the Colonial Governments. In order to complete its control over the stocks of cross-bred and merino wool in the United Kingdom the War Office took possession, during the spring of 1917, of all stocks of such wool and of all cross-bred tops except those which were already "held by users for the purpose of manufacture by the holder." As a result of these measures the proportion of Government-owned cross-bred and merino wool in the United Kingdom rose from 22 per cent. on December 31st, 1916, and 29 per cent. on March 31st, 1917, to 60 per cent. on June 30th, 1917, and to 80 per cent. on December 31st, 1917.

The great need for army blankets was causing an exceptional demand for East Indian wool, particularly for the coloured sorts which had to be used in all cases where the specifications did not permit the wool to be dyed. The prices of these coarser wools rose by 100 per cent. to 250 per cent., and it became essential to control their distribution so as to secure the necessary supplies for army contracts. Accordingly, a scheme was prepared by a joint committee, on which the East Indian Wool Importers' Association, the Liverpool Wool Brokers' Association, and the Northern Wool Buyers' Association were represented, to take over the distribution of East Indian wool on its arrival in this country and to distribute it to approved users on a fixed price basis; a member of the trade was appointed as East Indian Wool Distribution Officer to supervise its operation. At the same time the Indian Government undertook to stimulate the collection of wool in India and to arrange for the whole quantity to be shipped to the United Kingdom. It is a point of contrast between this scheme and that dealing with British and Colonial wool that the East Indian wool is at no stage in the actual possession of the Government.

In the autumn of 1916 it became necessary to devote special attention to the question of the labour supply. Recruiting had been heavy, and, moreover, fell unevenly on different sections of the trade owing to the fact that the proportion of men of military age to the total number of persons in the industry varied considerably in the different processes, and consequently the finely-adjusted balance of the trade became upset. In wool-sorting, carding and combing, and mule-spinning, in which men are largely employed, the proportion of men of military age was about three times as high as in spinning and weaving, where women and juveniles preponderate. If we consider the trade as a whole and compare the net loss of enlistment in this trade with that in all industry, we find that the proportion is about half as high as the average. In spite, however, of this comparatively low percentage of enlistment, men had become very scarce, particularly in some of the skilled processes, and in order to keep pace with the military orders it was necessary to employ women on some classes of work which had hitherto been reserved for men. Already in February, 1916, an agreement to facilitate dilution and to prevent the exploitation of cheap female labour, on similar lines to the munition agreement, was concluded between the most important manufacturing employers' associations and trade unions, and later also in the dyeing section of the trade, and most of the pivotal occupations were placed upon the Reserved Occupations Lists. At the same time neighbouring munition works exerted a powerful attraction on the engineers in the trade and also on many of the other workers, whose normally low wages compared very unfavourably with the far higher standard of pay in the engineering trades. The trade was certainly by this time depleted of many essential men, whose loss hampered production, and was in general short of suitable labour, while within the trade itself the higher wages which firms on civilian work were able to offer were a constant factor in reducing still further the workers in the employment of Government contractors. If the delivery of army goods was not to suffer through shortage of labour, it was necessary to review the whole position from the different and sometimes conflicting points of view of the contracts and the recruiting departments of the War Office itself, of the employers and of the trade unions concerned; for all were interested parties and all possessed special and peculiar knowledge, without which it was impossible to form a right judgment either on general questions or on individual cases. In order,

therefore, to ensure complete co-operation between all the interests, joint industrial advisory committees on man-power and production, consisting of representatives of the recruiting and the contracts departments, of the employers and the trade unions, were set up in the woollen and worsted trades of the West Riding, in the flannel trade, the Midlands hosiery trade, and the Scottish woollen and hosiery trade. These committees, after reviewing the whole position in the light of the need both for men and for production, laid down certain principles of action, and advised the military representatives of the tribunals, or the tribunals themselves, with regard to the applications for exemption for individual men in accordance with these general principles and with their special knowledge of the particular circumstances. These committees, whose influence is based entirely on the goodwill and co-operation of all parties, have been most successful, and may be considered to have paved the way for the co-operation on a larger scale between the State, the employers, and the employed.

The problem of securing that all firms able to undertake Government orders should take their fair share of the work on the costings basis was also solved by voluntary agreement. It has already been mentioned that those firms who were used to making army clothes had a considerably lower cost of production than those who were new to the work; further, some districts accustomed to the manufacture of similar cloth were able to produce more cheaply than others, whose machines could indeed make the goods required, but who were accustomed to a different standard of work. In other words, the actual "conversion cost," as ascertained in the approved manner by accountants, varied considerably from firm to firm and from district to district. It was obvious that when once the demand for army goods began to slacken, the need for economy would be a strong incentive to the Government to terminate first those contracts based on a high conversion cost. This fear created a reluctance to accept army contracts, both on the part of firms who could only make the goods after re-arranging their mill with a resulting high conversion cost and who wished to be sure of a prolonged run of contracts to compensate for the changes made, and also on the part of those who were able to produce the goods cheaply, but wished to be released from army orders as soon as possible in order to resume their normal trade. To meet these difficulties firms were grouped in districts corresponding roughly to the prevailing methods of production; equitable conversion costs for

each district were agreed upon with representatives of the local manufacturers, and an undertaking was given that when the time arrived to reduce or terminate Government contracts the change should operate over all districts in proportion to the contracts which they held.

The intimate local knowledge of the group representatives was also extremely valuable in advising the department with regard to their area as to the best means of obtaining the highest and most economical production and of distributing to the best advantage the Government contracts assigned to them by the Central (Allocation of Contracts) Advisory Committee, which is composed of the chairmen of the local groups. In the event of a temporary breakdown in the deliveries of one member of a group, owing to a fire or some other cause, the other members are expected to do their best to make up the deficiency. As a result of the willing and invaluable assistance obtained from manufacturers by means of this system, it has been possible to place Government contracts over a much larger area than before and to secure the very large output which is now required.

Efforts were also made to stimulate production for the export trade, the value of which constitutes as much as 11 per cent. of the total value of our manufactured exports, and which was therefore of great importance in maintaining the rate of exchange, particularly with the United States. An export priority scheme was devised, by means of which woollen goods destined for export were to receive from manufacturers a priority second only to that of Government contracts. However, before the scheme was able to come into effective operation, two events occurred which changed the whole situation. The declaration of unrestricted submarine warfare made it imperative to husband with the greatest care a raw material which is not only essential for carrying on the war, but is bulky and produced mainly on the opposite side of the globe, while the resulting entry into the war of the United States caused the urgency of the export problem largely to disappear. In consequence, the export priority scheme and the machinery set up to carry it into effect became transformed into a rationing scheme, with the object of restricting the consumption of wool to a safe quantity and of distributing the available supplies in a fair and judicious manner.

The advice and coöperation of the trade was obtained first by means of committees selected from an advisory panel, and later through the Central Wool Advisory Committee, which contained representatives of all sections of the trade, from the wool

merchants who import the raw material to the woollen merchants who export the finished cloth, and included all branches of wool-using manufacture.

After full discussion in the light of all available information, it was decided to effect a reduction in the wool used by two methods concurrently, namely, a reduction in the hours worked and a restriction in the amount of wool or tops allowed to be taken into consumption. By an Army Council Order issued on May 24th, 1917, working hours in weaving and worsted spinning were reduced from the beginning of June to forty-five hours per week in place of the normal fifty-five and a half hours, or to a lower figure in cases where less than the normal hours had been worked on the average during March, 1917, and a proportionate reduction of hours was arranged for woollen spinning; later, after a census of wool stocks had been taken, the working week was altered from September 1st to fifty hours or the equivalent in all sections of the industry. There were several reasons for adopting the plan of short time in preference to the alternative method of stopping altogether an equivalent proportion of machinery, as in the cotton trade. It was in accordance with the usual practice of the trade; it effected an economy in running expenses, such as heating and lighting; it prevented any disturbance in the balance of machinery in the mill, and, most cogent of all, it avoided labour difficulties, for a substantial increase of wages happened to coincide in time with the shortening of the hours, thus obviating a diminution of the actual money earned. The closing down of machinery would necessarily cause the unemployment of a considerable number of operatives, mainly women and young persons, for whom there was not sufficient work in the districts where they lived; while comparatively few men would be released, since most of them were employed in positions of responsibility from which they could not be spared so long as the mill was running at all. At the same time there are several obvious reasons against this method. The idleness of some of the machinery would undoubtedly set free additional men, such as mule-spinners, for the army; further, it would enable the labour which was rendered superfluous to be absorbed into other essential work and would thus prevent the enormous waste of labour power involved in the loss of ten working hours weekly by about 300,000 persons. This time, which is roughly equivalent to the normal working hours of 54,000 persons each week, cannot be considered an unimportant consideration at a time when all resources must be husbanded to the utmost and when man-power

is one of the decisive factors in the struggle. A further objection to the reduction of working hours as a means of economising wool-consumption is to be found in the fact that in many processes a diminution in the number of hours worked by no means results in a corresponding diminution of output; this is particularly noticeable in the case of piece-workers, who wish to maintain their earnings and are able to work during the shorter period at somewhat higher pressure. Little information showing to what extent output is affected by short time has been collected, although many firms have gained very interesting experiences bearing on this question which will no doubt bear fruit in a more economical organisation of their work. One result of the shortening of hours was at once felt by the Contracts Department itself in the difficulty of maintaining the full quantity of cloth due for delivery each week. The spreading of contracts had already made unnecessary much of the overtime by means of which alone adequate supplies were produced in the early days, but it could not be carried much further, and in the case of some articles, such as blankets, all the machinery which could be used for Government work was already fully employed; in consequence a reduction of hours could only result in these cases in a dangerous reduction of output. It was therefore necessary in particular instances to grant permits to exceed the reduced hours, with the result that complete equality of treatment between firm and firm could not be maintained.

In hosiery manufacture a different principle was adopted, and the consumption of yarn for purposes other than Government contracts was reduced to a quantity 70 per cent. or less of the average consumption for civil purposes during January, February, and March, 1917.

The other method of reducing wool consumption adopted concurrently with the shortening of hours was more complicated in operation, but if satisfactorily carried out, more successful in its results. After careful consideration of available stocks, past consumption, future Government requirements, and expected supplies, the quantity of clean scoured wool which might be consumed by each firm for civilian purposes during the rationing period was determined. Committees possessing the confidence of the trade were established in each area as District Rationing Committees and sent representatives to a Joint Rationing Committee whose task it was to distribute the total quantity available for civil consumption equitably between the districts. All firms wishing to consume wool or tops during the period had to apply to their

District Committee for a rationing certificate and to give particulars of their requirements of wool and tops, their stocks, their running machinery, their consumption in 1916, and their Government contracts, as required by the application form. All applications were carefully scrutinised by a committee of experts in the light of all the information available, and in each case a "permissible" amount was fixed in accordance with a definite formula. The sum of these "permissible" amounts was compared with the total available for civil consumption in the area, and a "dividend" was declared by a simple sum in division. The "dividend" was then calculated for each firm on the basis of its "permissible" amount, and no firm was allowed to put into work during the rationing period more wool or tops than the quantity stated on its rationing certificate. The amount of yarn which it was calculated would be spun from the ration of wool and tops was distributed among manufacturers by a similar method and on the same principle. It must be noted that this ration must not be exceeded, even if the firm possesses, and has on its premises, stocks exceeding its allowance. On the other hand a firm may purchase supplies for the whole or any part of its ration if its own stocks are insufficient or unsuitable in quality. Obviously the weak spot of this scheme, which is watertight in theory, is the difficulty of its enforcement, especially in the case of firms holding large private stocks. During the first rationing period, from June 1st to August 31st, 1917, this difficulty was increased by the fact that no legal control was exercised over consumption until June 11th, in the case of cross-bred, and July 2nd, in the case of merino. Moreover, it was assumed by the spinners and manufacturers that no further restriction of consumption was required beyond that effected by short time, and that in consequence the civil ration, together with the supplies allotted for Government contracts, would be sufficient to keep all machinery running as usual for forty-five hours a week. Unfortunately, too, the scheme came into force before the arrangements for putting it into practical operation were completed, with the result that the rationing certificates informing the trade of the amount of wool, tops, and yarn which they were allowed to put into work were only issued two or three weeks after the beginning of the period to which they applied. Some firms fearing the coming restrictions put as much wool as possible through their machines while they were still free to do so, and then found that they had used up all, or almost all, their ration for the next months. When, therefore, the allotment became

known, it was anticipated that much machinery would be rendered idle. A great outcry was raised and doubts were expressed as to whether the official statistics on which these drastic steps were based really justified so large a curtailment of consumption. It is easy to understand the discontent which these severe restrictions created, particularly as it was not possible to make public all the reasons which necessitated this action. The trade saw large stocks of wool lying in mills, warehouses, and docks, and did not yet sufficiently realise the serious effect which the depletion of merchant shipping would have in the coming months on wool imports. Much angry comment took place both on the Bradford Exchange and in the local Press, and, in order to clear the air and to give an opportunity for an interchange of views, Mr. H. W. Forster, the Financial Secretary of the War Office, addressed representatives of the employers and of the workpeople at two meetings held for the purpose in Bradford towards the end of June. It was clear that the time had now arrived for entrusting to the industry itself the responsibility for adjusting many of the technical questions which were raised both by the size of the Government requirements and by the shortage of wool supplies, a responsibility which the trade were indeed anxious to assume. At the same time a reorganisation was necessary within the rapidly expanding department itself. All the arrangements for the purchase and transport of wool and the making of tops were centralised in London in the hands of the Controller of Wool Supplies and under the immediate supervision of the Director of Raw Materials, since it was obviously impossible for the War Office to divest itself of the responsibility for the large stocks of wool and tops which it owned. The Raw Wool Section was assisted by a Raw Wool Advisory Committee, which took over some of the functions of the Central Wool Advisory Committee, and contained representatives of all the interests concerned with the importation and handling of wool up to and including the stage of top-making. The controversy over the statistical position was laid by giving full opportunity for its investigation and by the appointment of a permanent Wool Statistical Committee containing representatives of the trade. The investigations and discussions showed that no wide difference existed between the estimates made within and without the department. The discrepancies on which so many attacks on the department had been based were found to resolve themselves into a difference of opinion as to the yield of the different qualities of wool which made up the stocks in the

country, a subject on which complete agreement cannot be expected. Steps are now being taken to ascertain, by careful tests, the actual yield of wool which is being imported, and the controversy has thus led to experiments which will result in far more accurate knowledge of this important subject, and will be of permanent value to the trade. Up to date, however, satisfactory results have not been obtained.

At the same time additional powers were delegated to the War Department Cloth Office, in Bradford, which had been making arrangements for the placing of contracts during the past year, and whose head became the Director of Wool Textile Production, with an independent Department responsible for the supply of all cloth and hosiery required by the British and Allied Governments. In addition to providing for the military and naval needs of the British and Allied Governments, it also provides the wool textiles requirements of all other Government departments and over 2,000 public services, such as the railways and corporations, Egypt, India, and the Crown Colonies. A Board of Control of Wool Textile Production was set up to control the civilian production of the trade and to assist the Director of Wool Textile Production in his work. The composition of the Board of Control is extremely interesting as an experiment in industrial democracy; for it represents an equal partnership between the State, the employers, and the workpeople. The chairman is the Director of Wool Textile Production, and the ten other official members are heads of branches in the department, including representatives of the Raw Wool Department, so as to secure co-ordination between the raw wool and the production branches. The most important employers' associations were invited to elect representatives, distributed as follows: three worsted spinners, three manufacturers representing the West Riding, and one of the West of England and Scotland respectively, one representative each from the carpet and felt, the hosiery, and the shoddy trades; the National Association of Trade Unions in the textile trades chose eleven members to represent the whole Association. The Board of Control thus commands the confidence of the whole trade, and its recommendations are recognised and accepted as necessary.

The first subject to which the Board of Control turned its attention was the urgent question of the rationing scheme. A committee was appointed to consider the whole subject in the light of past experience and to draft a scheme acceptable to all the interests concerned. After considerable discussion and

negotiation it agreed in recommending the continuance of rationing certificates for wool, tops, and yarn, and the method of allocating the rations already described. At the same time it devised a system of monthly returns of yarns delivered during the previous months to be furnished by manufacturers through spinners to the department, in order to ensure that each individual manufacturer who buys all or part of his yarns obtains his fair share of the yarn made from wool or tops allocated to spinners. Priority in supplies for any particular class of civil trade was abolished, as well as the key certificates given by cloth merchants to manufacturers. Thus all trace of the original idea of export priority disappeared. A special procedure was also elaborated for bringing into the scheme yarn merchants both in the export and home trade.

The control of so large a quantity of raw wool has naturally placed upon the British Government the responsibility for securing an equitable distribution of wool, tops, yarn, etc., not only to her own manufacturers, but also to her Allies. It was natural to use for this purpose the Commission Internationale de Ravitaillement, an organisation set up to enable each Allied Government to obtain without competition from the others the supplies of manufactured goods it needed from the United Kingdom. A regular procedure has grown up governing the wool distribution, as one Allied country after another has come to realise the military importance of this essential raw material and taken steps to control its use in its own country. An estimate of requirements for six months or a year ahead is obtained from each Ally using raw wool or its semi-manufactured products, the needs for civil and military purposes being distinguished, and arrangements are made for satisfying the demands as far as supplies permit. Military requirements are, of course, given precedence in the same way as they are for Government contractors in the United Kingdom, while their civil needs have to be curtailed to the same extent as those of British manufacturers. In addition to the advantages of a reasoned distribution of, instead of a scramble for, wool, this procedure has also enabled the Allies to tighten up the blockade so far as wool is concerned, since the South African and South American markets, which now remain the only source of free wool, are almost entirely dominated by the United States. Neutral countries are therefore mainly dependent on the British Empire for wool supplies, and it is possible to negotiate with them for a fixed ration not only of raw wool, but also of tops, noils, yarns, waste, etc., which is only sanctioned in

consideration of favourable reciprocal treatment. The War Trade Department issues the export licences for all wool supplies, after recommendation by the Commission Internationale de Ravitaillement with regard to requirements of the Allies and after consultation with the Raw Wool and the Wool Textiles Production Departments as to available supplies, with the Foreign Office as to the different destinations and the Treasury as to finance. When the ration to be exported to each country has been decided after consultation with all the departments concerned, it is handed over to the Trade Committees of the Board of Control to allocate the quantity fairly between the individual exporting firms, who have to furnish monthly returns in order that control may be exercised over them in the same way as over other users.

It will thus be seen that when the problem of rationing supplies was thrown on to the trade, it found itself obliged to continue a control as stringent as that exercised solely by the department, and, indeed, that it went further, in requiring further returns to ensure that it was carried out. The necessity of withholding information from the enemy prevented the publication of figures which would have helped the trade to realise earlier the seriousness of the position. But the increasing shipping losses and the decreasing arrivals of wool is proving an irresistible argument in favour of the measures which had been taken by the department before the shortage became apparent to the outside public.

The Board of Control also considered at an early stage proposals for preventing a further rise in the cost of woollen clothing for civilian wear. It was decided to try the experiment of putting on the market at fixed prices in competition with "free" goods a range of serviceable cloths made up into suits for men and boys, produced and distributed through the normal trade channels on the "conversion cost" system. The public would thus have the opportunity of obtaining clothing of a sound quality at a reasonable price, and would also have a standard with which to compare the charges for other clothing made without restrictions. Arrangements have also been made for the supply of standard flannel, hosiery, and blankets on the same system. It is expected that the existence of fixed prices for these standard articles will keep other similar goods at approximately the same price level.

Another interesting development of the system of conversion costs is seen in the scheme for the supply of officers' cloths. Up till recently these cloths were produced and sold in the same way as ordinary civilian requirements, with the result that the prices

had enormously increased, while the quality was no longer maintained. In consultation with the cloth manufacturers, the woollen merchants, and the tailors, arrangements have been made for the manufacture and distribution on a commission basis of special cloths to be sold to officers at fixed prices, according to quality, and it is estimated that the cost has been reduced in this way by about 30s. per uniform.

There remain two other classes of wool products used as raw material in the wool textile trade, both of which are influenced by Government action, but in different ways. The wool waste produced in the course of manufacture was controlled by an Army Council Order in the summer of 1917; a census of all stocks was taken, and after July 31st, 1917, no sales might take place except at fixed prices and under a permit from the department, contracts made before the date of the Order being exempted for a period of five months. Thus, at the end of 1917, rags, and the shoddy made out of them, remained the only uncontrolled raw material of the wool textile trade, although here also the department is able to exercise considerable influence through the large supplies of shoddy, of which it is itself the owner, and which it is estimated amounts to about one-third of all the shoddy produced in the United Kingdom. By means of a careful salvage system, old uniforms, hosiery articles, etc., are collected from all the theatres of war and sent to the Government Rag Depôt at Dewsbury, where they are torn up into shoddy and issued to contractors for making army cloths, for which it is particularly suitable. The problem of rags and shoddy has still, however, to be solved.

We have completed our survey; we have watched the effects of the war as it has gripped in turn each branch and each firm in the wool trade, forcing all, as they struggle to live amid the ever-changing and unprecedented turmoil, to ask themselves, individually and collectively, as an elementary condition of their existence, what service they are rendering to the national life, and when the answer to this question has been found, to organise themselves so as to perform this service in the best possible way. The services required from the industry for the support of the national life in general, and of the war in particular, have been easy to recognise, although the individual members have not all rendered an equal contribution towards their performance. The best method of achieving the desired results has been found to be co-ordination and co-operation: co-ordination imposed at first by the pressure of external circumstances and later recognised as

necessary and developed by voluntary agreement; co-operation suggested at first by the need for combined action and later embodied in permanent forms and applied to a growing range of objects. Thus the wool textile trade has moved along in the same direction as other trades, and has gained experiences enabling it to take a leading part in the various experiments in industrial organisation which are being made. The joint partnership of State, employers, and workers in the Board of Control has already been described. Active minds are looking beyond the needs of the moment to a time when military demands will abate, and the successful resumption of civil trade will require the joint energies and devotion of all those engaged in the industry.

DOROTHY M. ZIMMERN

THE INCOME TAX ON WAGES BY QUARTERLY ASSESSMENT.

The "period of the war" has witnessed many experiments in national finance of vital importance in the present, and of grave significance for the future. By legislative enactment and administrative action many proposals, formerly highly controversial, have been put into actual operation swiftly, and with surprisingly little comment. National necessity has proved an efficient lubricant for novel forms of State action.

There are few actions of a Government which are capable of arousing more acute opposition than the levying of taxes which, in their incidence, are considered to be unjust. The Finance (No. 2) Act of 1915 lowered the limit of taxable income from £160 to £130. The Act was passed without serious opposition, although it is estimated that the measure has affected some two million persons who had previously been exempt. This Act, like the National Registration Act and others passed during the war period, provides another example of the great difference between what the people think the Governmnt is doing and what the Government knows it is doing, and *vice versâ*. It was argued that the new taxpayers would feel a deeper "sense of responsibility," that the payment of direct taxes would "stimulate an interest in Government affairs," etc. The actual effect has been narrowed down to a particular interest in getting the burden removed from the shoulders of the wage-earners at the earliest possible moment. This attitude might have been expected, as there are many precedents for wishing to remove the burden of taxation. But there are probably few cases, within the last fifty years, of new taxation where the feeling of injustice is more intense.

In the Report of the Commission of Inquiry into Industrial Unrest (for Scotland) the following appears (par. 18): "The bringing of workmen, earning what *they* regard as a bare living wage, within the range of the income tax, is strongly represented

as a cause of unrest . . ."; and, in the same paragraph: "This is a matter which affects all classes of the community, and to make recommendations upon it is scarcely within the scope of this Commission. At the same time, we feel bound to report that the great mass of working men having been, for the first time, brought under the income tax is undoubtedly amongst the causes of industrial unrest." Mr. J. J. Mallon, in a Note added to the Report of the same Commission (No. 3 Division, Yorkshire and East Midlands Area), states: "To satisfy the feeling prevalent among the wage-earning classes for more drastic demands on the rich, which is usually expressed by the phrase 'conscription of wealth,' the income tax should be carefully reviewed and substantially increased as regards those incomes which are capable of curtailment without any real loss to the amenities of life." One of the Commissioners for the South Wales Area has stated to the writers more recently that the lowering of the taxable income limit is undoubtedly causing grave unrest in that area, but no evidence of this unrest was asked for, or offered to, the Commission.

The writers of this article have been carrying on a series of investigations into the effect on the wage-earner of the present income tax on wages. Meetings of workers have been attended in twenty-three industrial areas of Great Britain, where the question was discussed. The writers have also had opportunities of considering the matter in conversation and correspondence with wage-earning taxpayers in most centres where the better paid workers are employed. One conclusion is certain. The Government has not realised the extent of the unrest nor its nature. In the Summary of the Reports of the Commission little attention is paid to this question. In the statement issued by the Right Honourable G. N. Barnes from the offices of the War Cabinet, and published in the Press on August 27th, no mention is made of any proposals to mitigate this cause of unrest. On August 26th "the Miners' Federation of Great Britain waited upon the Chancellor of the Exchequer to ask for the extension of the exemption from income tax up to £160 per annum. . . . Mr. Bonar Law made a sympathetic reply, but did not hold out any hope of any change. He promised, however, to consider whether an allowance of a similar amount should be made for a wife as is now made for children." (*Manchester Guardian*, August 29th.) On October 8th a statement was issued to the Press from the Board of Inland Revenue to the effect that Mr. Bonar Law had expressed his readiness to propose to Parliament, in connection

with the next Budget, a new wife allowance of £25. This is where the matter stands officially at the time of writing this article. Unofficially it is known that in one industrial area some thousands of wage-earners have refused to pay the tax, unless certain concessions are made.

It is the purpose of this article to show how these conditions have arisen and to indicate the nature of desirable concessions to be made, failing the impracticability of the restoration of the limit of £160.

The quarterly assessments apply to "weekly wage-earners employed by way of manual labour in respect of the wages arising from that employment, and do not apply to persons employed as clerks, typists, draughtsmen, or in any other similar capacity. The expression 'weekly wage-earner' means a person who receives wages which are calculated by reference to the hour, day, week, or any period less than a month at whatever intervals the wages may be paid, or who receives wages, however calculated, which are paid daily, weekly, or at any less intervals than a month."

The Finance (No. 2) Act gives the Commissioners of Inland Revenue powers to regulate the assessment and collection of the wage-earners' tax as they think fit. These powers have been used in so far as they allow (*a*) the Surveyor of Taxes to make the assessments, and (*b*) the adoption of so much of the provisions relating to Schedule E as may be applied. In the case (*a*) it will be noticed that larger discretionary powers are given to the Surveyors of Taxes in fixing the assessments. In the case (*b*) these discretionary powers are still further widened by leaving the question of allowances to be decided by the Surveyors. Under Schedule E (Official Salaries) an allowance is made for "expenses wholly, exclusively, and necessarily incurred in the performance of the duties of the office or employment." This allowance bears a much more limited interpretation than the words used would suggest, as taxpayers have found who have tried to substantiate a claim for, say, travelling expenses. In its relation to the income tax on wages this clause has been the subject of a conference between the Parliamentary Committee of the Trade Union Congress and the Board of Inland Revenue. The result of the conference has been issued in the form of a Circular by the Board of Inland Revenue, defining more closely allowances which may fairly be considered to come under this description. There are allowances (*inter alia*) for tools, explosives, clothes, and similar expenses; out-working and lodging money; subsistence and

travelling expenses. The Surveyors adjudicate on claims made for these allowances according to the evidence they are able to get from the wage-earners, the employers, and other sources. In the event of any dispute the wage-earner, or the Surveyor, has the right of appeal to the District Commissioners. Only few instances of appeals have come to the notice of the writers. The battle has been fought out between the Surveyor and the wage-earner. It is the arbitrary amounts of these allowances which have been one of the causes of so much widespread dissatisfaction.

One instance, tools, is sufficient to show the bearing of these allowances on this dissatisfaction. The cost of tools varies according to the particular trade, the conditions of factory or other organisation, the prices ruling locally, the care with which the worker uses his tools, etc. The result is that the claims are varied according to circumstances. Evidence in the nature of receipts for purchases of tools is lacking. It is often the case that a claim for a small amount for tools is taken as the standard throughout a trade, and claims from all wage-earners in that trade are levelled to this figure. The wage-earner explains as well as he can, but too often a workman, skilled with his hands, is no match for a civil servant, untrained in the technicalities of industrial operations, but astute in looking after the financial resources of his country. Trade Union officials, coming in touch with those of their own trade in other districts, find a substantial variation in the amounts of the allowances—a variation which cannot be explained by differences in local conditions. Some branches of Trade Unions have pressed their cases so wisely and strongly that they have secured for their members higher rates of allowances than are being made in an adjoining district. The net result is an industrial question closely allied to the fixing of minimum wages rates. Deputations are the order of the day in the centres where Trade Unionism is strong and active. In one industrial centre 500 men refused to pay taxes until their demands had been settled. The individual taxpayer is usually left with a sense of injustice because his claim has been reduced —he does not understand why, neither does he understand how he might vindicate his rights. The Government has touched him, frightened his wife with its blue, buff, white, and pink forms; he had better pay and save further trouble. Thus, unwittingly, he creates a precedent for the Surveyor which can be used in other cases. The tendency in such cases is for the amount of the allowances to be relatively low, and not moderate or high.

As to actual cost of the tools to the taxpayer, this is only a small factor in the assessment. The allowance granted depends more on advocacy. The same procedure is adopted with regard to other allowances already mentioned.

Perhaps the greatest variations in practice exist in regard to the allowance for clothes. Throughout the areas visited it was noticed that the narrowest interpretation had been placed on the words "exclusively for the purposes of the employment." In most instances the cost of overalls had been disallowed. In a selection of twenty cases where this expense had been claimed there were only two instances where the cost was allowed. In chemical works, where the chemicals handled had damaged the clothing of the employees so as to make it unwearable, an arbitrary figure had been agreed upon between the taxpayer and the Surveyor for cost of replacement. The same proceeding applied to cases where stokers had claimed for cost of clothing spoiled by hot cinders burning trousers and boots. In the case of miners the claims for clothes were invariably disallowed, presumably because it was argued that the clothes worn were old suits brought in for the purpose of working clothes. In the instances where exceptions to this rule occurred, claims were made for clothes spoiled by sulphuric acid leaking from the batteries of electric lamps carried by the miners in some collieries; boots spoiled through continuous working in water; and the extraordinary wear and tear of clothing when working in abnormal places. The leather aprons of blacksmiths and blast furnace men had in many instances been allowed. The following are examples of flat-rate allowances for the year made to steelworkers :—

Millmen :
- Twelve aprons a year, at 1s. 6d. each.
- Four small shirts, at 4s. each.
- Twelve sweat towels, at 6d. each.
- Four clogs (2s. 9d., tips 4d.), 3s. 1d. each.

Shearers :
- Aprons (sacks), 26 at 8d. each.
- Leathers, 8s. a quarter.
- One straight-edge, at 1s. 6d.
- Rules, two a year, at 2s. 9d.

Smelting Shop (Siemen's Furnace) :
- Furnacemen (1st, 2nd, and 3rd hands), £11 per annum for tools and clothes.
- Gasmen, charge wheelers, £4 per annum.
- Teemers, pitmen, £11 per annum.

In the Doncaster colliery district the following flat-rate allowances were secured :—

	Per annum. £ s. d.
Proportion of Contribution to the Yorkshire Miners' Association, for superannuation benefit	0 2 6
Permanent Fund (death benefits)	0 3 8
Tools, per man	2 10 0
Back bonus	1 0 0
(Bonus granted retrospectively and covering period previous to liability for tax.)	
Checkweigh	1 4 0
Pit levies, tips, sharpening picks	3 15 0
(The tips are those by custom paid to helpers, *e.g.*, in getting quick removal of coal from coal face. In the Doncaster district the "Butty" system is in vogue, the stallmen paying day men and the employer contracting with the stallmen.)	

In other districts the following are allowed :—

United Pattern Makers.—10s. a quarter for depreciation and upkeep of tools.
Amalgamated Society of Carpenters and Joiners.—£4 per annum for aprons and tools.
United Kingdom Society of Coachmakers.—£4 per annum for tools.
Merthyr Vale Steam Coal District of S. Wales :
  Collier, £1 a quarter for checkweigh.
  ,, £1 ,, ,, tools.
  Powder (explosive) as per docket (receipt or other certified note).
  Timbermen, repairers, £1 a quarter for tools, and explosives as per docket.

Afan Valley :
  Explosives and checkweigher, the actual amounts paid.
  Tools.—Colliers, repairers, and carpenters, £1 a quarter; masons and fitters, 10s. a quarter.
  Working in water.—Hauliers and/or riders, £2 a quarter.
  Clothes, boots, etc.—Miners (and others employed about the colliery), £1 a quarter. Where naked lights are used, 15s. a quarter.

These flat-rate allowances have proved the most satisfactory to all concerned. They are, however, exceptional, the procedure usually being for men to produce worn-out or spoiled clothes to the Surveyor and to agree upon the cost of replacement. This method cannot but be the cause of great dissatisfaction and unequal treatment. It is also cumbersome and wasteful of time.

To illustrate some of the difficulties underlying the attempt to deal with each case on its merits, the following are some allowances which have been claimed and allowed in some districts, but not in others : Food of locomotive drivers and stokers, which, in rough weather and from accidental causes, gets spoiled on the engine; insurance of tools against loss by theft or fire; various fines against miners (*e.g.*, for filling dirt among clean coal, lost tokens, for filling trams under weight, etc.); the cost of antiseptic pastilles used by some chemical workers; tips paid to helpers for speeding up deliveries, etc.; the allowance to railway-

men as booking-off bonus for a double trip; expenditure on travelling to work at exceptional times of emergency.

Under Section 54 of the Income Tax Act of 1853 relief in respect of the payment of annual premiums for insurance on the lives of a taxpayer and/or his wife was granted. It was provided that such premiums should not exceed one-sixth of the taxpayer's income. By Section 17 of the Finance Act of 1915 a further proviso was made—*i.e.*, "In respect of any premium or other payment payable on a policy for securing a capital sum on death (whether in conjunction with any other benefit or not)" a person shall not be entitled to deduct from income "more than 7 per cent. of the actual capital sum assured," exclusive of any additional benefit by way of bonus or otherwise. (Section 37 of the Finance Act of 1916 gives relief in respect of war insurance premiums and, in respect of these insurance premiums, excludes the provisions with regard to the maximum of one-sixth of the annual income, and the one-seventh ratio between premium paid and capital sum assured. It also provides for the relief "whether the premiums are payable annually or not." The risks covered by the "war insurance" premium are those arising from war or war service abroad for which an additional amount is payable on an existing policy.) The maximum 7 per cent. ratio excludes quite 80 per cent. of the premiums paid by wage-earners. The insurances usually effected are those on which a weekly or monthly sum is payable to secure £10, £20, or £25 at death, or on reaching a certain age. The premiums payable usually exceed 7 per cent. of the capital sum secured. The wage-earner therefore finds himself at a disadvantage compared with other taxpayers who pay annual premiums which bear a lower ratio to the amount payable at death. This is a penalty he has to bear through conditions over which he has no control. In fact, his effort to provide for a small nest-egg, or the funeral expenses of himself or his wife, is for taxation purposes definitely excluded from consideration, except where the premium has been increased on account of the extra war risk, and then only for so much of the additional sum payable. This is undoubtedly an instance of unequal class distinction, and should receive early attention by the Parliamentary representatives of labour. The payments which the wage-earner makes to a Trade Union or Friendly Society have been considered, and so much of the contributions as is allocated to death or superannuation benefits is allowed as a deduction from taxable income. No restrictions in respect of proportions of income to premium, or premium to benefit, are

made. It can only be assumed that the wage-earning taxpayer was forgotten when the question of insurance relief was discussed in the 1916 Budget resolutions.

Apart from the action of a few Trade Unions, it is in regard to the allowances for tools, clothes, travelling, etc., and relief in respect of insurance premiums where the wage-earners consider, with some justification, that they are receiving arbitrary and unequal treatment.

The Miners' Federation of Great Britain, noticeably active and always in the van of progressive Trade Unionism, has consistently pressed for reform in this matter of taxation. At the conference held in 1916 the question of income tax was discussed at some length and the following resolution proposed: "That we press for the repeal of the enactment for the taxation of wages, and until that is accomplished the £160 basis of liability should be restored, and a considerable extension of the allowance for children to other dependants. . . ." In the course of the discussion the main opposition arose out of the desire of the conference not to tie itself down to the £160 limit. The matter was remitted to the Executive Committee "as being too large a question on which to formulate a policy." The importance of the resolution is shown in the discussion and its sequel. The arguments brought forward included the injustice of taxation which is passed over from the capitalist to the worker; the anomaly of the children allowance, which did not (at that date) include an adopted child; and the inequality of sacrifice (instanced by the margin of income over expenditure, the increased cost of living, the need for the conscription of wealth, and extension of Excess Profits Duty so as to cover all excess profits). One resolution included the following words: "If the Government do not withdraw it" (the income tax on the working classes) "the Federation to consider the advisability of taking industrial action to force the same." The sequel has proved that weight is attached by the Government to the action of the Federation. In the Budget following this conference the adopted children allowance was agreed to. At the meeting with the Chancellor of the Exchequer, already mentioned, the allowance to dependants other than children is foreshadowed. Still, the agitation goes on. Individual members of the Federation refuse to work when they believe they are getting near the income limit which would make them liable for tax; and this resistance occurs in spite of the fines they incur for absence from work. At the Trade Union Congress at Blackpool resolutions to the same effect were brought forward by the

Miners' Federation and carried by the Congress. It may be noticed (in the Press extract quoted earlier) that the main argument put forward at the conference with Mr. Bonar Law was that "the purchasing value of the sovereign had been reduced to 11s. 4d." Later reports state that at a delegate conference of the South Wales miners held at Cardiff to consider the Chancellor of the Exchequer's concession on income tax a resolution was passed in favour of the total abolition of taxes on wages. This may be taken as an index of the attitude of the Federation generally on the proposed concession.

It will be seen that the question of reform resolves itself into two sections, first, the proposal on the part of the Miners' Federation that the present limit be raised to £160, which, it argues, is the subsistence limit under present conditions; and, second, the line of Government action which refuses to raise the limit, but grants concessions so that individual taxpayers will escape payment of the tax according to those circumstances which the Government considers worthy of recognition in this connection.

Both propositions may be supported by all the recognised canons of taxation, but the instance given by the miners would suggest that their case is based on "taxation in proportion to revenue or ability to pay." The question of "ability to pay" and the subsistence limit cannot be discussed effectively without considering circumstances outside the scope of this article. For instance, the present index number (September, 1917) of the *Economist* is 257.1, showing a pre-war purchasing value (for food and clothes) of less than 8s., as compared with the present purchasing value of £1.

The intention of the Government has evidently been to make concessions by enlarging the scope of the deductions from taxable income, and thus to arrive, by stages, at a patched-up system of taxing the working classes, owing to the exceptional demands of war expenditure. This work of patching up an emergency Finance Act will, in the opinion of the writers, be more likely to allay the causes of unrest in this matter if the following reforms are effected :—

1. *The Establishment of generous Flat-rate Allowances for Clothes, Tools, etc.*—The present system is arbitrary and unequal in its results. Each district (for income-tax purposes) could arrange flat rates with local branches of Trade Unions representing the various industries in that district. Failing Trade Union or other organised representation of the workers, each industrial concern could appoint a representative according to the trade, or section

of a trade, claiming the allowance. A minimum representation of, say, ten workers might with advantage be arranged. The flat rate could then be determined by deputation to the Surveyor of Taxes, or, failing an agreement being reached, by the District Commissioners. The rates agreed upon should be in force for a period not exceeding twelve months from the date of their adoption, or subject to revision at three months' notice by either side.

2. *The Co-option by the District Commissioners of Persons who understand the Trades of a Particular District.*—The Finance Act (No. 2) of 1915, Section 28, Sub-section 5, provides for this representation, if the powers given are exercised so as to co-opt those persons who could give skilled advice on the requirements of particular trades in respect of clothes, tools, etc. The machinery is already provided by the Act. It is desirable in practice that every facility should be given for fixing flat-rate allowances on a just basis, and this can be better ensured if one or more of the Commissioners know the trade conditions from experience.

3. *The Removal, for the Purposes of the Wage-earner's Tax, of the 7 per cent. Ratio in respect of Insurance Premiums.*—The raising of the percentage only would involve complications which might still exclude from the relief those wage-earners who had insured at an advanced age. The restriction to "annual premiums" should also be removed for purposes of this tax.

4. *The Simplification of the Work of Assessment by making Annual Assessments instead of Quarterly.*—The quarterly assessments provide employers and tax officials with a great deal of work which might be avoided. At the present time the employer is bound to submit four times within one year the names and addresses of all employees earning £32 10s. and over per quarter. The work of sending out notices of assessment, returns by employers, appeals, notices for payment, etc., is quadrupled. The choice of weekly payments or quarterly payments is already given. This choice might with advantage be extended to monthly or annual payments. Many rating authorities adopt the method of annual assessments and periodical payments without losing by the system. The wage-earner is troubled with income-tax forms four times a year, where other taxpayers in the ordinary course deal with them once a year. No imagination is required to realise the effect of having to consider the complications of income-tax assessment four times a year. This method of quarterly assessment is further complicated by the fact that in the case of "unearned income" the wage-earner receives his notice of assessment *annually*. One instance may be quoted here. A taxpayer received

twenty-five communications from the tax authorities within one year. This is an average of about one each fortnight. He paid over to the nation's revenue the sum of 17s. 5d. He had two interviews with the Assistant Surveyor of Taxes and wrote five letters. Another instance might be quoted of the complications of the quarterly assessments. A taxpayer who is exempt in one quarter can carry over any difference to the next quarter, so that finally he will not pay more than his legal liability *for the year.* A yearly assessment would be able to include income from all sources. The present system must result in loss to the revenue in many cases, and wasted effort on the part of Government servants in most cases.

5. *The Extension of the Allowance for Children so as to include other Dependants.*—The Chancellor of the Exchequer has promised to grant an allowance from income of £25 for a wife of a taxpayer. This leaves the bachelor who is supporting his mother or other relations without that relief. Great Britain, one among a minority of European nations, does not recognise in taxation matters the expenditure of a taxpayer towards the support of indigent relations. Austria, Saxony, Bavaria, Würtemberg, Norway, all include within the deductions from taxable income an allowance for indigent relations. This expense is one of the outstanding features of the wage-earner's budget. His home has ties and affections deeper than those of any other class in the matter of support to relations. His financial resources in innumerable cases bear the cost of maintaining at least one relation, whether the wage-earner is married or single. The position of the wage-earner in this respect has caused some bitter criticism of the tax.

The National Union of Women's Suffrage Societies advocates personal assessment on a wife's income. At present this income is included with the husband's (except where the wife is separately employed) with the result that a bachelor and spinster pay a total tax of about one-third the amount they would have to pay if married.

6. *The Apportionment of the Children Allowance, according to Date of Birth.*—At present no allowance is made for the year of assessment for a child born within that year. This means that a taxpayer cannot claim the allowance for, say, 1917–18 if the child is born on April 7th, 1917, but if the child is born on April 4th, 1917, the allowance can be secured. It would be more equitable if the allowance were apportioned according to the month in which the child is born; thus an allowance of ten-

twelfths of £25 could be made for a child born in May. This more equitable apportionment should not be difficult to arrange, as the date of payment of tax is late in each income-tax year.

7. *The Exclusion from Taxable Income of Bonuses and other Extra Payment for Increased Output.*—The inclusion of these items may, if the present unrest is continued, cause serious loss of production. Numerous instances of passive resistance have occurred where workmen do not work extra shifts, or do not increase output, because they know that it would bring them over the income limit for taxation purposes. The basis for wages assessment should be the standard wage.

8. *A sufficiently wide Margin before Earned Income makes the Wage-earner Liable also on Unearned Income.*—The unearned income of the wage-earning taxpayer is usually the result of thrift, and represents the savings of himself or his wife. The fact that his earned income brings him in touch with the tax authorities makes him disclose this unearned income. The taxation of this unearned income is resented, and a suitable limit of, say, £25 per annum unearned income should be fixed, so that the wage-earner would not be taxed on this part of his income unless it exceeded that figure.

The carrying out of the foregoing suggestions would remove some of the anomalies of the present position and make the tax more equal in its incidence. The wage-earning taxpayer is bearing a heavy burden in the amount of indirect and direct taxation paid. The administration of the income tax on wages requires care to see that it is carried out in direct relation to the conditions of the taxpayers concerned. The easing of the burden where it falls too hardly would mitigate some of the injustices of the present system.

The cost of collection, in its relation to the amount collected, is evidently satisfactory to the Government, although no figures are available. A considerable amount of income, apart from wages income, has been brought under the incidence of the tax, and the increases in wages have greatly increased its scope and the amount produced.

Whatever the social or political consequences of the new application of income tax may be, it is quite certain that several *economic and politico-economic consequences* merit serious consideration. Some of these have substantiated economic theories previously established, others have necessitated considerable revision of former theories. Although direct taxation is more equitable and democratic than indirect, it is more productive of

irritation and unwillingness to pay on the part of the taxpayer than is indirect taxation. The latter is much heavier in amount, relatively, but is concealed in burden by inclusion in the prices of taxed commodities. The payment of a few shillings directly for income tax is nursed as a personal grievance, especially as an addition to indirect taxes, and as a peremptory demand for cash out of wages, followed oftentimes by a tax on unearned income from savings invested.

The relation of direct to indirect taxation must be reviewed in the light of experience of the assessment upon wage-earners. The direct taxation on wages is resented the more as it is a supplement to the tax on commodities.

The assessment of income tax up to the present has been levied by almost purely administrative method. The assessment of income tax on wages has introduced a more democratic element, for in some coalfields committees have been appointed to represent the men and to determine questions of allowances, etc. Sub-collectors to assist in collection have been appointed by ballot, and in practice have advised as regards assessment as well as collection. It is impossible to assess income tax on the wage-earner smoothly without basing it upon some representative system.

It is as regards these latter features that the tax on wages needs consideration. It is open to argument whether the net gain to the State is worth while, for allowance must be made for the heavy expenses of the new machinery for assessment and collection, the loss of production, incentive to saving, and irritation queering the pitch for future development of the more democratic forms of direct taxation.

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CURRENCY AND GOLD NOW AND AFTER THE WAR.

In all the principal countries of the world there has been a big rise during the war in the currency price of goods; in other words, there has been a world-wide general depreciation of the currency units.

Another feature of the war period has been the almost universal suspension of the convertibility of paper currencies into gold. In some countries, as, for example, in Germany, conversion has been suspended by law; in England it has not been suspended by law but only by consent. We, therefore, naturally ask whether, in those countries where suspension has taken place, there is any specific depreciation of the currencies in terms of gold. In Russia, in Italy, and elsewhere specific depreciation has been definitely admitted by the Government, and a premium on gold has been fixed and authorised. In England specific depreciation is not admitted, but, nevertheless, it may exist, and it is necessary to examine our position closely.

Treasury Notes are, practically speaking, inconvertible. It is true that in certain circumstances you can convert the Notes into gold coin at the Bank of England at par, but you cannot melt the coin you obtain, or export it, or sell it within the country for more than its par value in Notes, and those people, in particular jewellers, who do want gold for other than hoarding and currency purposes, are paying, I am told, as much as £6 an ounce, a premium of over 50 per cent., for such gold as they can legally purchase for use in the arts and industry. But the existence of the premium on this gold does not prove specific depreciation of the currency, any more than the absence of a premium on British gold coin disproves it. There is no real market in gold.

Can we draw any conclusions from the state of the Foreign Exchanges?

Some of the exchanges are very much below the low gold point, but it may be argued that England, the debtor country, could easily bring back the exchanges to parity by exporting goods, gold, securities, or promises to pay, if political and military reasons

did not prevent her from sending them, or the creditor countries from accepting them. We maintained the American exchange for many months at the low gold point, even when America was only a neutral, and it is not unreasonable to suggest that what we were able to do in the case of the American exchange we are fully capable of doing in the case of the less important exchanges. I certainly think that in the present circumstances the discount on some of the foreign exchanges is no conclusive evidence of specific depreciation of our currency, and in this connection I may perhaps remark that Dr. Cassel's theory that "the movements of the exchanges are simply determined in the main by the quotient between the inflation of the different countries" appears to me to be quite untenable under the present war conditions.

But let us test this defence of our depreciated exchanges. Supposing that the exchanges on every neutral and allied country were in at least as favourable a condition as the American exchange, could we advance our exchange position as conclusive proof of the absence of specific depreciation? If the currency of a country is changing hands at par with gold both internally and externally, and if it is nowhere changing hands at a discount, depreciation has certainly not been made evident in actual transactions, but the absence of actual specific depreciation does not prove the absence of potential specific depreciation. Insolvency can exist without bankruptcy, and bankruptcy will not arise unless creditors press their claims. In the same way we may say with confidence that the foreign exchanges cannot be a test of the true condition of our currency, unless the external drain is working freely. Is the external drain working?

With enemy countries we have no dealings, and the most important neutral exchanges are heavily against us. In the first case the external drain has not operated, and in the other we have failed to meet it. Of our Allies, some have had an unfavourable balance of trade and payments with us, while those countries which have had a favourable balance have not pressed their claims as they might, and probably would have done in normal times—I am thinking particularly of the United States.

I suggest, therefore, that under present conditions the exchanges tell us practically nothing about the value of our currency in terms of gold. If we seek an answer to the question we can only make an *a priori* guess, and for my own part I should guess that specific depreciation would be revealed immediately, if the normal tests were applied. We cannot disguise the fact that it is primarily at our request that our creditors are holding

off, and that it would be awkward for us if their claims were pressed. Their forbearance may be, and, in fact, almost certainly is, due to other reasons than their confidence in our solvency. We are piling up a huge adverse trade balance, we are borrowing heavily abroad, and while we are, it is true, lending abroad also, we are lending to countries which are not in a position to repay us immediately if we were to call in our loans. Yet, in the face of all this, we are persistently inflating our currency. Surely these are not conditions which in normal times would inspire an observer with confidence in our ability to withstand the internal and external drains, and maintain the convertibility of our currency into gold at par?

We have seen that during the war the internal and external drains have not been in operation. Will they come into operation again at the peace, and, if so, what will the result be?

The internal drain on gold does not appear to be a danger for this or any other country. In fact, it is hard to conceive that it will be allowed to be so. I do not anticipate that a gold currency will be used again internally, even in England, for many years to come, and it is quite likely that the world will never return to it. Paper currencies here and elsewhere will probably be practically, if not absolutely, inconvertible into gold for internal purposes, and gold will probably be reserved for international uses. Some form of gold exchange standard was in almost universal use even before the war. Will not England after the war have to adopt this system?

The external drain is quite another matter. I admit that conditions are likely to remain abnormal and artificial for some considerable time after peace. The nations of the world may be rationed independently of their purchasing power, and, amongst the Allies at any rate, creditors are hardly likely to press their claims. Nevertheless, if gold retains its present position as the standard of value here and elsewhere, and if we endeavour to maintain the parity of our paper with gold, London will, sooner or later, have to face the external drain upon gold.

There is so much talk in these days about the demonetisation or "dethronement" of gold that any discussion of the external drain in terms of the gold standard may seem futile, but I do not think that it is so. International trade without a material standard of value is surely an impossibility? We know what chaos results even within a single State under a *régime* of inconvertible paper, and the world is not yet a single State with one supreme authority in currency matters. Gold may be a bad

standard, and I quite recognise the fact that it may before long be replaced by a better, but so long as it is replaced by some material thing or combination of material things, the fundamental problems of the foreign exchanges and the external drain will remain unaltered. International trade and credit operations will continue, whatever the material standard may be, and adverse balances of trade and payments will lead to an external drain upon that standard, or upon promises to pay it.

But there is another possibility with regard to gold after the peace, a possibility which differs from that of its complete rejection as a standard.

Sweden has abandoned the free coinage of gold during the war, and several authorities are suggesting that it will be necessary for the gold standard countries to adopt the same policy after the war if they wish to avoid receiving what Professor Wicksell calls "a mass of useless gold" in exchange for their commodities. Let us endeavour to test this proposition by taking as an illustration the case of Germany and the United States. We will suppose that Germany has been defeated, or, at any rate, that she has secured no indemnity, and that she is in dire need of foodstuffs and other things which the United States can supply. We will also suppose that Germany has not sufficient commodities to offer in payment to satisfy the United States, but that she has reserves of gold. What are the United States to do? It is no good their trying to get from Germany the commodities which cannot be supplied, and as they will be in the position of upper dog it is certain that they will not give more of their commodities than they need for what Germany has to offer. On terms it must surely pay the United States to take either Germany's gold, or her promises to pay gold, or her promises to pay commodities. But the barter of future for present commodities would be extremely difficult to arrange, and I do not see why the United States should trouble about it. Why should they refuse Germany's gold or promises to pay it? If I understand Professor Wicksell rightly, he would say that the United States should refuse gold because it will be depreciated in terms of commodities, and likely to depreciate further. That gold will be depreciated in terms of commodities when peace comes as compared with its pre-war price cannot, of course, be admitted without qualifications. It may be that gold will not be depreciated, that only the promises to pay it will be depreciated, all openly depreciated in terms of commodities, some openly in terms of gold, and others potentially, though not openly, in terms of gold. This is a possi-

bility, but it is not probable, and it is quite fair to assume that gold, as well as the promises to pay it, will be depreciated when the war ends. The fact of this depreciation, however, will not be any reason for refusing to take the gold or the promises in exchange for commodities. It is the subsequent course of the price of gold which will determine whether a purchase of it at the peace will be a good or bad bargain, and I cannot see that there are any obvious reasons for anticipating a further fall in the price of gold during the post-war period. If the United States, England, Japan, and the other prominent gold-using countries make up their minds to retain gold as the standard, is it not more likely that gold will slowly appreciate rather than depreciate? And is not this appreciation likely to take place, even if the Central Powers unload their gold upon us, and then adopt some entirely new standard of value? Is it not in the power of the Allies to maintain the use of gold by a convention, if they wish to do so, and by maintaining the use of it to secure a powerful protection against its further depreciation? Again, would not the United States and other countries with an exportable surplus of foodstuffs and raw material throw away much of the advantage of their position if they were to refuse to sell that surplus to Europe? The demand of Europe will be a demand which it will seek to satisfy almost regardless of price, and in the circumstances the relative value of the exportable surplus of the United States and other countries will probably be so high that it will almost certainly pay them better to sell and take payment in gold, even if gold is going to depreciate further, than to restrict the volume of their sales abroad.

It appears to me, then, that there is no reason whatever why the United States and the other gold standard countries should stop the free coinage of gold at the peace, and in discussing the external drain we may assume that the use of gold as the standard of value will be maintained.

The external drain must be regarded from two points of view. In the first place we must consider the position of the whole world as a single unit, and in the second place we must consider the position of each country as a single unit affected by relations with other countries.

If we take the world as a whole we have to ask ourselves whether the existing supplies of gold are sufficient to perform the function of a foundation for international trade and financial operations, with currency prices at their new level. If Russia, Italy, Germany, and others were going to attempt to restore and

maintain the parity of their present paper currencies with gold soon after the peace, we might reasonably have serious doubts about the sufficiency of gold, but it is almost certain that these countries are not going to make the attempt, and if the rest of the world economises in gold by not using it internally and by reducing its use as far as possible internationally, a world-wide specific depreciation of paper currencies may quite well be avoided. Bimetallists will, perhaps, take the opposite view and use it to support a new campaign.

Let us now consider the position of this country in relation to others. In normal times the chief causes of an external drain are :—

1. An adverse balance of claims in the short-loan market which may or may not arise from a current adverse balance of trade.
2. An adverse trade balance, giving rise to an adverse balance of claims.
3. An inflation of currency or credit relatively to other countries, which results in cheap offers to the foreigner of gold or promises to pay it.

I have already stated that I do not expect the external drain to be forced upon us by our creditors in the period immediately following the peace, so that I shall only consider the possible postponed or ultimate effect of these causes, bearing in mind all the time that our present policy should certainly take account of this ultimate effect. If a man is insolvent, or in danger of insolvency, he is extremely foolish to assume that his creditors will withhold their claims indefinitely.

First, with regard to the balance of claims. When war broke out practically every country was on balance a debtor to London in the short-loan market. Mr. Withers in *War and Lombard Street* says that when London called its loans "it put the rest of the economically civilised world, for the time being, into the bankruptcy court." "None of its debtors could pay." "Foreign creditors it had none, except Paris."

After the war we may be the creditor of Russia, France, Germany, and other European countries, but we shall probably be indebted to several very important countries, including the United States.

This change in our position is likely to last for a very long time, and ultimately it will have two very important effects upon London.

In the first place the risk of our being subjected to the ex-

ternal drain is almost certain to be increased, because, although our credits as a whole may exceed our debts, several countries will be our creditor on balance, and in the second place our ability to withstand the drain will be impaired, and we shall be compelled to make radical alterations in our method of defence. This second effect will result from the fact that we shall be a debtor to strong countries and a creditor of the weak. The "bank rate" policy coupled with small gold reserves was admittedly effective only because we were not merely the world's creditor on balance, but also practically every country's creditor. We may, therefore, have to support our "bank rate" policy with other devices, including much larger gold reserves, and some of the aids employed by European countries before the war.

As to the possibilities of a favourable or adverse balance of trade there is not much to be said. If the balance is going to be adverse, our prospects when the artificial period ends and the external drain begins to operate will be so much the worse; if it is going to be favourable, the recovery from our present position will at best be slow. The early years of peace do not appear to offer us a foundation for very high hopes. There will almost certainly be a great and world-wide scarcity of foodstuffs and other present consumption goods constituting the prime necessities of life. Goods of this kind are, of course, very scarce now, during the war, but there is also at least an equal scarcity, as compared with the demand, of coal, steel, and other products which are normally supplied by the industrial countries to the countries exporting foodstuffs. When peace comes the supply of foodstuffs will not increase rapidly, nor will the demand fall off, but the demand for steel and other goods consumed in large quantities during the war will certainly not increase, while supplies will be offering on something like the war scale. In the circumstances peace is likely to cause relative values to shift in favour of the countries producing foodstuffs and against the highly-developed industrial countries, such as England. Thus, although we may be able to increase the volume of our exports when the war is over, we may not be able to purchase an equivalent volume of imports, calculated at the ratio of exchange obtaining during the war. To take a single example, after the war we shall probably sell more coal to the Argentine than we have done during it, but each ton of coal will probably buy less wheat then than it does now. Perhaps the strongest card in our hand for some years to come will be our shipping.

We still have to consider the third cause of an external drain

—namely, an inflation of currency or credit relatively to other countries.

There are three different cases of this problem:—

1. The case of two countries each with an inconvertible paper currency.
2. The case of two countries, one of which has an inconvertible paper currency and the other a paper currency convertible into gold.
3. The case of two countries, each of which has a convertible paper currency.

In the first case the movement of gold between one country and the other is not materially affected by changes in the relation between the volumes of the two currencies, and, in any event, this case does not concern us at the moment.

The second and third cases do concern us. Any country with a convertible currency which maintains specie payments fixes the commodity price of gold at the commodity price of paper. Hence, if such a country inflates its currency, it will lower the price of gold in terms of commodities, and, as a result, it will tend to lose gold even to a country with an inconvertible paper currency. That is so because, at some point in the ratio of exchange between goods and gold, the inconvertible paper country is certain to prefer gold to goods.

England has to face the position covered by each of the last two cases, and it appears to me that it is by no means improbable that as the result of inflation she will after the war be offering gold or promises to pay it at a price in terms of commodities which will attract not only the countries with convertible currencies, but even some of those with inconvertible currencies. I am not arguing against Professor Wicksell's hypothesis, with which I am inclined to agree, that after the war Germany and nearly the whole of Europe will be ready to offer gold for commodities rather than commodities for gold. Europe may offer gold, but there are plenty of countries able to absorb it. The United States, Japan, India, Canada, Australia, the Argentine, Brazil, Chile, all of these, and many others, are almost certain to take gold in exchange for commodities at a price.

If inflation does produce such a position in England, I believe that a continued limitation of specie payments will be the only sound policy. A severe contraction of credit is a very harmful remedy and not necessarily an effective one. The other method of staving off the drain is to borrow abroad, if possible. But in the circumstances of our hypothesis this would be fatal as a con-

tinuing device. It is madness to attempt to keep down the commodity price of gold on a market which has all the appearances of rising by continuously selling a bear of it. In the end the credit of the seller must give out, and the crash will be all the worse for the postponement.

I have endeavoured to show that we need not suffer from the internal drain when peace comes, but that the external drain will be a very real and serious danger, a danger threatening our free gold market, the sterling bill, our position as a financial centre, and all the advantages, direct and indirect, which they bring to us.

OSWALD T. FALK.

THE BANK RESTRICTION OF 1797

THE nearest parallel to the great war of our own day is to be found in the wars of the French Revolution and Empire. Somewhat less concentrated and more intermittent, those wars shared with it, nevertheless, the terrible characteristics of economic ruthlessness and world-wide extent. The economic protagonists were France and England. For both the economic strain made itself apparent in grave currency difficulties. In the case of France these difficulties belonged chiefly to the early years of the war. The assignats have taken their place in history as the classical example of paper-money made worthless by over-issue. After their final collapse in 1796 French finance reverted perforce to a metallic basis, and so remained till 1815.[1] In England the currency difficulties began just when those of France ended. The restriction of cash payments by the Bank of England occurred on February 27th, 1797, and continued throughout the war, ending only in 1819, four years after the conclusion of peace.

The currency difficulties in England differed completely from those of France, occurring as they did in a highly developed credit system which had already been adapted to finance a great mercantile and industrial organisation, and the continuity of which was disturbed by no revolutionary outbreaks. In the preceding generation, to the credit facilities provided by the Bank of England for the great London merchants there had been added a network of country banks providing similar facilities all over provincial England. These banks, like the Bank of England, issued notes. They also received deposits, but cheques had not yet come into such general use as to make a deposit on current account a convenient medium of payment. This extension of banking was naturally not exempt from those disagreeable evidences of the instability of credit, periodical financial crises. One such crisis had occurred in 1783, and after an interval of ten years

[1] The Bank of France had to suspend cash payments more than once, but in those days its circulation played a modest part in the business of the country. Far the greater part of transactions were in specie.

credit was in a state of dangerous inflation when the outbreak of war, with the consequent revision of values, in January, 1793, precipitated another. At that time Bank of England notes did not circulate to any great extent far from London, but the country banks held part of their reserves either in Bank of England notes or in deposits kept with London banks. There were no bank-notes below £5, and (till 1795) no Bank of England notes below £10. There was very little silver coin, and for the all-important purpose of the payment of wages and for retail purchases gold coin (guineas, half-guineas, and seven-shilling pieces) was indispensable, and the characteristic of a crisis was always an urgent demand upon the Bank of England for gold to be sent out to the provinces. The usury laws, limiting interest to 5 per cent., were a serious obstacle to an efficient control of credit. In 1793 the Bank of England endeavoured to cope with the crisis by restricting credit: it refused to lend. The natural result followed: solvent firms were threatened with failure. The Government intervened and obtained statutory powers to make advances to merchants. The advances were not made in cash, which the Government could only have obtained from the Bank itself, but in Exchequer bills. The merchant, embarrassed with a stock of commodities on which no banker would lend, was thus provided with a security which he could get discounted. Having gained the power of borrowing he could afford to see his cash balances fall, and the demand for guineas was relaxed. In the end the whole amount of £3,855,000 advanced by the Government was repaid by the borrowers.

At the beginning of the war there was no appreciable financial strain on the Government. The financial year in those days ended in October. In the year 1792–3, which included eight months of war, little was borrowed, and in 1793–4 only about 10 millions (the revenue being about 18 to 19 millions). It was in the course of 1794–5 that the difficulties began. In that year the deficit met by borrowing was 20 millions, besides a guaranteed loan of £4,600,000 raised for the benefit of Austria, and in the following year it was necessary to borrow 25 millions. In those days such loans put a severe strain on the national resources. From time to time Pitt was compelled to ask for advances from the Bank. The Bank was prepared to go a long way to accommodate the Government, as it had done before in time of war. But in the spring of 1795 the foreign exchanges showed an ominously unfavourable tendency. The practice prevailed of financing the forces abroad by means of bills drawn on the Pay-

master-General or the Treasurer of the Navy, and payable at the Bank of England. When the bills arrived the Bank was expected to provide the money to pay them, and statutory authority had recently been obtained for the advances made by it for this purpose. The perpetual arrival of new bills, for the payment of which the Government had made no separate provision, was the cause of growing misgiving to the Bank, and led the Directors to make repeated protests to Pitt—protests which grew in urgency as the foreign exchanges became more adverse. The Directors urged him to keep down the advances for the purpose of meeting these bills to a maximum of £500,000 outstanding at any one time. In practice this was an ideal never attained; at times they exceeded £2,000,000.

At that period the most important of the London exchanges were those on Hamburg and Lisbon. Lisbon was important because most of the new supply of gold came from the mines of Brazil and travelled *viâ* Portugal. Hamburg was important as being the great *entrepôt* for the trade of Northern Europe. In normal times the exchange on Paris was quite as important, but though war did not necessarily interrupt the quotation of the exchanges between the belligerents (and indeed the Paris exchange was regularly quoted in London from 1803 to 1815), this exchange was not quoted between October, 1793, and April, 1802.

Germany and the other countries of which Hamburg was the commercial centre had silver currencies, and the Bank of Hamburg only gave credit for silver, gold being bought in the Hamburg market as a commodity. There was, therefore, no real par of exchange with London. For the purpose of quotations there was an assumed par price of gold, six "marks banco" (or 96 stivers) to the gold ducat. This price, making the ratio of gold to silver 14·86 to 1, had become too low. In 1795 the ratio had reached that of 15½ to 1, instituted in the French coinage by Calonne ten years before. The London exchange was quoted in schillings and grotes, banco, to the pound sterling (a schilling of 12 grotes being 6 stivers, or ⅜ mark banco). At 96 stivers to the ducat, the gold in £1 was worth 34·3½, banco. At the ratio of 15½ it was worth 35·9. Allowing for interest for 2½ months, a bill on Hamburg was at par when the exchange was about 36. In the years 1795 and 1796 the *lowest* price of gold quoted in Hamburg was 98½ stivers, making the par 35. In the first quarter of 1795 the exchange averaged 35·7; in the second quarter it had fallen to 33·10½, and in the third it was no more than 32·5½. In October the Lisbon exchange, of which the par

was 67⅜ to the milreis, rose to 71½, representing nearly as great a depreciation of sterling as in Hamburg.

At last, in self-defence, the Directors of the Bank, recognising that the needs of the Government must remain paramount, decided that they must restrict trade discounts, and on December 31st, 1795, they adopted a resolution limiting the total amount of bills to be discounted each day for their customers other than the Government. If on any day the bills presented for discount in the aggregate exceeded the limit laid down, a proportion of the bills presented by each applicant were to be returned on his hands. Apart from the advances to the Government, this Procrustean reduction of discounts gave the Bank complete control over credit, and at the same time the advances to the Government (of which the obnoxious advances on Treasury bills in reality formed quite a moderate proportion) were themselves steadily reduced. Having exceeded £12,000,000 in December, 1795, they were reduced to less than £9,000,000 in September, 1796. But it was not till October, 1796, that the foreign exchanges were restored, and even then the Bank was not relieved from the drain of gold. At last in February, 1797, the signs of a crisis appeared. An invasion scare precipitated it, and the gold stock of the Bank, already seriously depleted by the strain of the preceding two years,[1] began to melt away. The Government came to the conclusion that the Bank could not stand the strain, and they obtained an Act of Parliament stopping the payment of its notes in cash.

It might, perhaps, be thought that this crisis bears its explanation on its face. Did not the Bank Directors go to the root of the matter when they pressed Pitt again and again to keep down his demands for temporary advances? No doubt they were right in attaching so much importance to this, but a glance at the actual variations which occurred in these advances will show that the explanation of the crisis is not to be found in them. In 1793, the first year of the war, they averaged a little over £9,000,000. In 1794 they were lower, the average being about £7,500,000. At the beginning of 1795 they rose quickly and exceeded £11,000,000, and, except for a temporary rise to £12,800,000 in December, 1795, they varied between £8,700,000 and £11,500,000 until the suspension of cash payments in February, 1797. At the moment of the crisis the advances were £10,600,000. Now in 1791 and 1792, under peace conditions, the advances had exceeded £9,000,000, and it is perfectly obvious that they could be increased

[1] It had been 6¾ millions in August, 1794; 2½ millions in December, 1796; and fell to 1¼ millions on February 25th, 1797.

to 11 or 12 millions in time of war without threatening a financial cataclysm. Indeed, while the Bank Directors were right to insist on the limitation of advances, it may fairly be contended that Pitt in substance complied with their demands. Though the inconvenient bills drawn abroad were constantly above the stipulated limit of £500,000, the advances as a whole were not excessive.

But what specially agitated the Bank Directors at the time was that so large a part of the money raised by the Government was spent abroad, either on subsidies to our allies or on the maintenance of our own forces. The amount so spent in 1794 was £8,336,000, in 1795 (besides a guaranteed loan of £4,600,000 for the Austrian Emperor) £11,040,000, and in 1796 £10,650,000. Undeniably these large remittances would have an unfavourable effect on the exchanges. But it must be remembered that this effect would be no greater than that of the investment of the same amount abroad in peace time. And any curtailing of the amounts annually invested or lent abroad, and any additional sums borrowed abroad during the war, must be set off against it. The operations of 1794 do not seem to have had much effect on the exchanges, which did not become seriously unfavourable till the spring of 1795. The large remittances of that year must, of course, have been an important contributory cause of the drain of specie that then set in. But so long as war expenditure is financed with genuine money, provided by a diminution of private expenditure, and not with inflated bank credits, the effect of even large remittances abroad will be moderate.

Sir Francis Baring, writing in 1797, stated that the war loan of 1796 had been taken by subscribers of insufficient financial standing, who "had recourse to circulations, operations on foreign places, and other expedients to enable them to make good their payments, which produced some effect on the course of exchange, but still more on the rate of interest in the country, which was soon pushed beyond what is allowed by law to be received." In so far as loans were raised from people who could not pay for them without borrowing, there would, of course, be a tendency towards unsound conditions. But if the subscribers succeeded in obtaining credits abroad, as Sir F. Baring suggested, the effect on the exchanges would be *favourable*—at any rate, so long as the foreign credits were not called in. And in any case the disturbance of the exchanges occurred long before the war loan of 1796 was issued.

The critics of the Bank blamed the Directors for restricting discounts. The Bank restricted discounts in order to keep down

its note issue. Some of the witnesses before the Secret Committee of the House of Lords, appointed immediately after the crisis, argued that the demand for guineas was due to this cause. Trade must have some means of payment; bank-notes will do, but if they are not forthcoming the only alternative is to ask for guineas. The country banks, it was said, restricted their issues in sympathy with the Bank of England, and hence the drain of gold. This argument is palpably wrong. The guineas were drawn out in exchange for bank-notes. It is true that a curtailment of borrowing facilities leads traders to hold larger balances, but those balances may just as well be in credit as in money. The demand for gold in exchange for credit must have been due to one or all of three causes—a need for gold for export, a need for gold as a means of small payments, especially payments of wages, or a loss of confidence in the banks. A loss of confidence in some of the country banks there may well have been; failures among them were frequent enough. Bank of England notes did not circulate much outside London, and such loss of confidence in the local banks would probably lead to a demand for guineas. But this loss of confidence itself calls for explanation.

Why, then, should the banks have been in difficulties? Why should gold have been exported? Why should guineas have been in demand for internal circulation? No petty little movements will be enough to explain so great a crisis.

The fact is that the financial situation in England, even in 1797, cannot be adequately studied in isolation from the financial situation on the Continent. For the first two years of the war the foreign exchanges were highly favourable to London. This was the period of the Terror in France, when the assignats were forced into circulation by all the rigours of the Committee of Public Safety, when the possession of a hidden hoard of gold or silver was a criminal offence, when everyone who had wealth in France was anxious to send it abroad. The countries adjacent to France were soon saturated with specie, and England got her share, as is shown by the exceptionally heavy purchases of foreign gold for the Mint in 1793 and 1794. The total for those two years was $3\frac{3}{4}$ millions, as compared with a normal average of about £650,000 a year. And, of course, more foreign gold was imported than was brought to the Mint.

The fall in the exchanges began in the spring of 1795. The exchange on Hamburg, which was above 36 at the end of March, fell in six weeks to 33·6, and in August to 31·10. Even at 33·6 it was already profitable to send specie thither, and in

August it was profitable also to send it to Lisbon. This is just the time at which France was returning to a metallic currency. The Law of the Maximum, the foundation of the whole system of assignats under the Terror, was repealed on December 24th, 1794. In January, 1795, a difference began to be made (contrary to law) between specie prices and paper prices, and soon there followed ever-growing complaints that farmers or merchants, first of all in the provinces and afterwards in Paris, refused to accept assignats at all. The laws limiting dealings in gold and silver were partly abrogated, partly ignored. By the end of the year the hopelessly discredited assignat had become an object of speculation rather than a means of payment. In the course of 1796 the Revolutionary paper-money was practically demonetised. In July, 1796, it was stated that specie, though scarce, was sufficient to meet the requirements of the markets, and specie prices were beginning to rise.

How intense was the pressure to send gold to France during this period of return to a metallic currency is proved by the quotations of the foreign exchanges on the Paris Bourse. For the period from August 23rd, 1795, to February 22nd, 1796 (except for an interval from December 14th, 1795, to January 13th, 1796, when the Bourse was closed), the pages of the *Moniteur* give us an almost complete series of daily quotations of the prices of gold and silver and of the exchange on Hamburg and some other places. The following table shows the monthly averages. The assignat being then in its death-agony, and valued at only a small fraction of its face value, each quotation is given at *so many times* the par value :

		French Gold Coin.	Foreign Gold Coin.	Hamburg Exchange.	Premium on Gold over Exchange.
Aug.	1795 ...	40·83	40·85	39·30	3·9 per cent.
Sept.	...	47·94	47·99	39·82	20·4 „
Oct.	...	73·83	76·05	62·54	21·6 „
Nov.	...	129·83	—	117·88	10·1 „
Dec.	...	172·85	—	156·97	10·1 „
Jan.	1796 ...	218·99	—	197·31	11·0 „
Feb.	...	257·42	—	244·76	5·2 „

When it is remembered that throughout these months the Hamburg Exchange was from 8 to 10 per cent. against London, it will be seen how enormous was the profit to be made by importing guineas from London to Paris. It was possible on September 20th, for example, for a man who wanted gold coin in Paris either to buy it at 4,650 livres per French ounce (472¼ grains English), or to buy a bill on Hamburg at 7,350 livres per 100 marks banco, to sell the bill in London for guineas at about

33 schillings (12⅜ marks) to the pound sterling, and to smuggle the proceeds across the Channel. As every 100 marks banco yielded more than £8 in English gold, equivalent to 2·1 French ounces, he would get 9,765 livres' worth of gold, leaving a margin of 2,415 livres to pay for the cost and risk.

But to appreciate the full significance of these figures it is necessary to understand that September, 1795, was precisely the month in which the Bank of England first began to suffer a drain of specie. This was expressly stated in the Report of the Secret Committee of the Lords, and confirmatory evidence is afforded by the actual text of the repeated remonstrances submitted during the year by the Bank to Pitt. By August these remonstrances had become very grave, yet no actual reference was made to any loss of specie before the urgent warning addressed to him on October 8th, when the price of *bullion* (on which the premium in Paris was less than on coin) was stated to be £4 3*s*. to £4 4*s*. per ounce.

The demand in Hamburg and Lisbon for specie from England, which remained intense for practically a year, was merely a reflex of the demand in France. The Secret Committee of the Lords obtained from the Customs statistics of the export of gold bullion. The exports recorded in 1795 and 1796 were almost negligible. At first sight this seems to show that, whatever the intensity of the demand for gold on the Continent, England escaped with a trifling loss. But the Customs figures are really worthless. The export of guineas, or even of gold melted down from guineas, was prohibited, and though gold melted from guineas was often exported with a false declaration, it was also often exported secretly. When receiving a deputation from the Bank on February 5th, 1796, Pitt mentioned that, according to the British resident at Hamburg, a large consignment of guineas had been sent thither in the packet from Yarmouth and melted down. As the direct demand came from France, it seems probable that much of the gold was surreptitiously sent across the Channel. There would, of course, be no Customs declaration even of French gold coin so shipped to an enemy. By April, 1796, the Hamburg exchange was no longer quite so unfavourable, though it did not rise consistently above the export specie point till the autumn. The Lisbon exchange, which was less important, was very adverse all through the summer of 1796, and only fell to par in October. The slow effect of the drastic contraction of discounts put into operation by the Bank in December, 1795, shows how great was the pressure to be resisted. But even when the export of gold was stopped

the crisis was not over. The large additions made before the turn of the tide to the stock of gold had had the effect of stimulating and hastening the revival of trade, which was in any case likely to follow the crisis of 1793. According to Jevons' index number, prices, which had risen from a level represented by 93 in 1792 to 99 in 1793, had stopped short at 98 in 1794, and then sprang up to 117 in 1795 and 125 in 1796. Certainly a part of this sensational rise of prices was due to war conditions, which created new demands and interrupted various sources of supply, but there is no doubt at all that it was in part due to credit inflation. Though it was said that the country banks had not increased their issues to the level of 1792–3, it was recognised that a great part of the reduction which then occurred had been recovered. The sequence of events was exactly what might be expected. First an influx of gold, then an expansion of credit, then a demand for legal tender money for internal circulation, a demand which could only be supplied by guineas. But for the violent movements of gold on the Continent, the demand for guineas might have been supplied without any excessive strain on the Bank. The coincidence of the external and internal demands for gold necessitated the restriction of discounts by the Bank of England. Credit was successfully contracted, the foreign exchanges were turned in favour of London, but, as usually happens, the internal demand for guineas was not immediately stemmed. And, what was more serious, the contraction of credit meant a heavy fall of values; Jevons' index number for 1797 was only 110, a fall of 12 per cent. from that of 1796. A fall of values means the failure of merchants, and the failure of merchants means the failure of banks. Hence the loss of confidence, which accentuated the demand for guineas. But the actual number of failures in the year was not very much above the average, and was far below the heavy total of 1793. The distrust by itself would have produced little effect but for the persistent drain of gold to which the banking system of the country had been previously exposed. When the crisis came it was appeased not by special advances of credit such as were made by means of the Exchequer bills in 1793, but by the issue of Bank of England notes of small amounts (one and two pounds), such as could take the place of gold in the payment of wages and in retail transactions.

It is a curious feature of the Bank restriction that the notes of the Bank were not made legal tender till 1812. They were accepted by the Government in all payments, and the principal merchants and bankers formally agreed together to accept them.

This was enough to establish them as the accepted means of payment, although legally they were nothing more than debts of the Bank of England, which the Bank was expressly forbidden by law to pay in legal currency. The restriction was ostensibly temporary, but was prolonged from time to time. The Peace of Amiens in 1802 did not bring it to an end, and on the renewal of war in 1803 it was enacted that the restriction should last till six months after the end of the war. In 1811 (when the controversy raised by the report of the Bullion Committee was in full swing) Lord King demanded payment from his tenants in coin as being the sole legal tender. Even then the bank-note was not immediately made legal tender, but an Act was passed forbidding any differentiation between coin and paper, so that paper, if it circulated at all, as it was bound to do in the almost complete absence of coin, could only circulate, or discharge a debt, at par. This ensured that the money of account should be tied up with bank-paper and not with gold. At last in the following year the bank-note was expressly made legal tender.

After the crisis of February, 1797, the effect of the contraction of discounts, which had been in operation all through 1796, made itself felt on the internal drain as it already had some months before on the external drain of gold. Confidence was quickly restored, and the foreign exchanges grew more and more favourable, the usual consequence of the contraction of credit and lowering of values in a country which has passed through a crisis.

At the time, however, it seemed paradoxical that the English crisis was hardly over, and the currency definitely established for the time being on a paper basis, before the Hamburg exchange started rising. By April it was above 36, and by August above 37. In December it touched the quite exceptional maximum of 38·5. For 1798 the average was 37·7½, and the exchange remained consistently above 37 till the spring of 1799. In the first instance, London had suffered more severely from the French demand than Germany. Notwithstanding hostilities, proximity had counted for something, and since the adoption of the ratio of 15½ to 1 in 1785, gold was no longer undervalued in France as compared with silver. War finance weakened the Bank of England's power of resistance, and the English credit system succumbed first. But the German system did not outlast it for long. In the summer of 1799 the inevitable collapse came. There were many failures, and such was the stringency that the exchange, which had still been at 36 in June, had fallen to 32 by the beginning of October and to 30 in the following year. In

May, 1800, gold began to be quoted at a premium in London, the price being £4 5*s*. an ounce, or 9 per cent. above the Mint price of £3 17*s*. 10½*d*.

This was the beginning of the depreciation of the Bank of England note. It is not easy to find a satisfactory measure of the depreciation. Three tests may be applied: the prices of bullion and specie, the foreign exchanges, and the prices of commodities. The first is the most direct. The premium on gold measured the departure from the gold standard. But gold was needed only as the means of remittance, and as nearly all our trade was with silver-using countries, the gold market was in an artificial condition. For long periods there was no market at all. There was no quotation from March, 1802, to April, 1804, nor from October, 1805, to February, 1809. Silver is therefore a better test than gold. We have a nearly continuous series of quotations either for standard silver bars or for Spanish dollars or for both. The ratio of gold to silver always gravitated towards that of 15½ adopted in France, at which the price of standard silver was 60·84*d*. and that of Spanish dollars 59·3*d*., and the premium as compared with these prices gives a fair approximation to the measure of depreciation. Silver and gold, however, being both merely the means of remittance, the market for them was practically one with the market for foreign exchange, in so far as the foreign currencies dealt in were on a specie basis. Portugal, which had been important as the channel through which Brazilian gold reached Europe, lapsed into a paper-money *régime*. Amsterdam after the French invasion lost much of its business as a great financial centre. There remained, as the principal exchange markets on the Continent, Hamburg and Paris. From 1802 onwards the London exchange on Paris was regularly quoted, notwithstanding the war; nor was the quotation of the London exchange on Hamburg suspended during the French occupation. But war plays havoc with specie points. In 1810 the actual cost of sending silver between London and Hamburg was estimated at from 1½ to 2 per cent., but insurance, which in peace was about 10*s*. 6*d*. per cent., was an incalculable factor; it might be 4 per cent., or more, or less. In 1811 the average price of silver dollars in London was under 6*s*. an ounce. For £1 it was possible to purchase 3⅜ ounces, containing 3 ounces of fine silver, which at Hamburg would be worth about 11 marks banco, or 29 schillings 4 grotes. For the same year the exchange on Hamburg averaged 24·11, so that a profit of nearly 18 per cent. was to be made by sending silver. In some other years at about the same time the

disparity, though not so great, was still substantial, the explanation being undoubtedly that Napoleon's Continental system threw obstacles in the way of the transmission of silver. Contemporaneously the exchange in London on Paris was in as artificial a condition.

For these reasons the prices of the precious metals and the foreign exchanges do not give an unquestionable measure of depreciation. There remain the prices of commodities. An index number, measuring the purchasing power of money, is in some respects the most perfect test of depreciation. But it does not pretend to measure the deviation from the metallic standard. And in constructing an index number we have to be content with such price records as we can get. Jevons obtained a series of index numbers from the statistics of prices collected by Tooke in his *History of Prices*. These prices, of course, covered only a limited range, and index numbers do not distinguish between a rise of price due to scarcity and a rise due to currency inflation. During the latter years of the war prices were violently disturbed by the desperate economic warfare.

Jevons calculated both paper and specie prices. The actual quotations were, of course, in paper. From them he obtained the specie prices by abating the premium on gold, but unfortunately he used a table of average prices of gold given by Tooke, which was, as he himself suspected, inaccurate. The inaccuracy was more serious even than he supposed, for neither he nor the other writers who used Tooke's figures seem to have observed that they refer to the year ending February 1st, with the result that they are practically one year wrong; so that, for instance, to the year 1816, when the maximum price of gold as returned to the Committee of 1819 was £4 2*s*. and the average barely £4, is attributed an average of £4 13*s*. 6*d*.[1]

However, the long intervals when the quotations for gold were either non-existent or nominal make it impossible to construct a table of specie prices on the basis of the price of gold alone. When both gold and silver were quoted their prices

[1] In his *Thoughts and Details on the High and Low Prices* (1823) Tooke heads the table "Account of the average market price of gold . . . from February 1800 to February 1821, extracted from Mr. Mushet's tables," but in his *History of Prices* (Vol. II, 1838) he omits all mention either of February or of Mr. Mushet, and describes the table as "from official documents." For some reason which I have not fathomed, Mushet's tables in his *Gain and Loss to the Fundholder* (1821) do not correspond exactly with Tooke's, one of his figures differing by as much as 4*s*. and two or three others by 2*s*. But Mushet states quite clearly that they run from February 1800 to February 1821, and his examples show that he means from the year ended 1st February 1800, to the year ended 1st February 1821, inclusive.

usually corresponded nearly to the prevailing ratio of 15½, and therefore the price of silver may be taken as a fairly trustworthy test of specie prices. In the following table are shown the prices of gold and silver and of bills on Hamburg and Paris, expressed on a percentage basis, par in each case being £100. The last three columns show Jevons' index numbers of prices, the computed prices in silver, and the ratio of gold to silver at Hamburg:—

Percentage Values.

Par.	Gold. £3 17*s*. 10½*d*. per oz.	Silver. 60·84*d*. per oz.	Exchange on Paris. 25·22 Fr. per £.	Exchange on Hamburg. 36*s*. banco per £.	Commodities. Actual prices. Prices of 1782.	Commodities. Specie prices (Silver). Prices of 1782.	Ratio of Gold to Silver at Hamburg.
1797	100·0	102·6	—	98	110	107·2	15·41
1798	100·0	100·1	—	96	118	117·9	15·59
1799	—	106·7	—	103	130	121·9	15·74
1800	107·0	113·5	—	113	141	124·3	15·68
1801	109·0	117·3	—	113	153	130·5	15·46
1802	—	113·7	105·7	109	119	104·8	15·26
1803	—	111·9	102·9	105	128	114·4	15·41
1804	103·0	108·3	100·1	101	122	112·7	15·41
1805	103·0	107·4	98·8	103	136	126·7	15·79
1806	—	110·5	103·0	105	133	120·4	15·52
1807	—	110·2	103·5	104	132	119·8	15·43
1808	—	107·1	108·4	106	149	139·2	16·08
1809	—	110·4	123·3	121	161	145·8	15·96
1810	—	113·9	121·6	120	164	144·0	15·77
1811	123·9	120·7	139·1	144	147	121·8	15·53
1812	130·2	126·5	131·2	128	148	117·0	16·11
1813	136·4	136·7	128·6	130	149	109·0	16·25
1814	124·4	124·3	116·4	119	153	123·1	15·04
1815	118·7	117·5	115·6	114	132	112·3	15·26
1816	102·9	100·9	99·6	100	109	108·0	15·28
1817	102·2	104·3	102·0	102	120	115·1	15·11
1818	104·6	106·5	104·3	105	135	126·7	15·35

The figures for gold, silver, and the foreign exchanges are based on the Appendices to the Reports of the Lords and Commons Committees on the Resumption of Cash Payments in 1819. Before 1811 the quotations for gold are spasmodic, never covering a complete calendar year, and the averages are therefore not reliable. For a number of years the figures for silver are based not on standard silver, but on dollars (with a par of 59·3*d*.). The ratios in the last column are taken from Soetbeer. The foreign exchange columns give the *premium* on francs and banco money—*i.e.*, the pars ought strictly to be given as 9·515*d*. to the franc, and 6⅔*d*. to the banco schilling.

The statistics show a general tendency towards increasing

depreciation, reaching a maximum rather before the end of the war. But this general tendency is broken by very considerable fluctuations. The maximum index number, both for paper prices and for specie prices, comes in the years 1809 and 1810. The maximum depreciation as tested by the foreign exchanges comes in 1811. As tested by the prices of gold and silver, it comes in 1813, the last complete year of war.

Space would not permit of a detailed examination of the various causes which contributed to produce this depreciation, or of the heated political controversies that were occasioned by it from 1810, the date of the Report of the Committee on the High Price of Gold Bullion, till 1819, when cash payments were finally resumed. It will be sufficient here to point out two or three salient factors. With the beginning of the Peninsular War in 1809, and still more with the great military coalition against Napoleon in 1813, the strain of war finance became greater than ever. The unfunded debt grew from £14,000,000 in 1802 to £57,000,000 in 1814. Napoleon's Continental system, based on the complete exclusion of British trade from Europe, began in 1806, and was made rigorous with the annexation of Holland and Hamburg in 1810. Another important influence was an acute financial crisis to which all the commercial centres of the Continent were subject in 1811, and from which credit on the Continent did not really recover till after the end of the war. The effects of the corresponding crisis in England, which occurred in 1810, were staved off at the cost of an inflation and consequent depreciation of the paper currency. But they were only postponed, and in 1814 peace brought a disastrous fall in values which almost extinguished the premium on gold at the cost of a terrible tale of bankruptcies and a period of extreme depression and distress.

R. G. HAWTREY

REVIEWS

The Value of Money. By B. M. ANDERSON, Jun., Ph.D., Assistant Professor of Economics, Harvard University. Author of *Social Value*. (New York: The Macmillan Co. 1917. Pp. 610.)

"THE theory of the value of money is a special case of the general theory of value. . . ."

"Value is not a ratio of exchange or 'purchasing power,' but is an absolute quantity prior to exchange. . . ."

"Economic value is a *species* of the *genus*, *social value*, co-ordinate with legal value and moral value. . . "

"The value of money, being a special case of economic value, is subject to the same general laws. . . ."

These propositions are taken from a summary in which the author recapitulates theorems propounded in the first two parts of his treatise, constituting about two-thirds of the entire work. Thirty-six articles are required to sum up the reformed economic faith. Or, rather, only the fundamental doctrines are set forth in this *confessio fidei*. On this basis is reared a superstructure of higher theory, culminating in a sublime topic, "the reconciliation of statics and dynamics."

We shall not attempt to sketch the imposing system as a whole. We shall direct attention to some important points, with respect to which we either dissent from the author or suspend our judgment.

Agreeing with Dr. Marshall as to the relation between cost of production and value, we disagree from the following statements:—

To the Austrian economists we owe a rational theory of costs. . . . Value causation comes ultimately, not from the side of supply, but from the side of demand. . . . "The real cost doctrine of the Classical School has failed" . . . "it is virtually only as a pecuniary doctrine, costs from the *entre-*

[1] See *Principles of Economics* as to Cost of Production *passim*, and as to Mill, Book v, ch. iii, § 2, p. 339 note (ed. 6).

preneur point of view, that the cost doctrine is met in modern theory. . . . Cost as conceived by Mill is a superficial pecuniary notion" (Chapter III.).

Our attitude towards other pronouncements is more neutral. They produce no conviction, but they provoke no contradiction. We have no strong opinion about the relation of the individual to society—with what truth an "organic unity" may be predicated of minds. We do not deny that "absolute value" may be attributed to money in some intelligible sense. We have not carefully compared the doctrines of Wieser, Mises, and Schumpeter as to marginal utility. We do not feel qualified to pronounce on the distinction drawn by one of them between the "inner objective value of money" and the "outer objective value of money" (Ch. V.).

We are disposed to agree with the author's dictum that the ultimate test of scientific theory must be practice—the capacity to solve problems. But we are not convinced that the new theory of social value would come out well from the test. Consider the following questions. If the money incomes of a class be increased *ceteris paribus*, in what circumstances is it possible that they will buy *less* than before of certain commodities? Is it true that if a rise in the price of bread raises the marginal utility of money to the poorer classes, they may consume *more* bread.[1] Marginal utility as used by mathematical writers seems more adequate to resolve such knotty problems than the new refinements.

Fortunately on the flood of dialectics some stray facts are found floating. The particulars given about the ways of business seem to us more valuable than the general theories which they are intended to illustrate. Thus, after perusing the chapter (Ch. XXIII.) which deals with credit in general, we do not find ourselves much wiser. But the following chapter, which deals with credit in relation to bank assets and bank reserves, contains some interesting information. It appears that only a small portion of the assets held by American banks can be regarded as liquid. Only a very small portion consists of "commercial paper"; and of the rest not so much as might be supposed is immediately available. The following case is described as typical:—

> A New York bank is at present lending to a small manufacturer of automobile supplies about $30,000. Of this, about $10,000 is liquid, periodically covered by "bills receivable," and if the bills receivable should fail, in the period in question, to cover the $10,000, the bank would insist on a

[1] See ECONOMIC JOURNAL, Vol. xxv (1915) pp. 47, 61, 190, referring to Marshall (*Principles of Economics*, Book iii, ch. vi, sec. 4), who refers to Giffen.

reduction of the loan. The remaining $20,000, however, is not liquid. It was spent for non-movable equipment; the bank expects to renew the notes for this sum periodically, and is well aware that it could not force collection without bringing the business to a close—or else forcing the factory to get accommodation elsewhere."

Loans on the security of crops having a natural term may be considered liquid; loans on animals being fed for the market belong to the same category. But of the loans on the security of livestock fully two-thirds are to breeders and not feeders, and hence are not liquid. We accept the facts about bank assets on the writer's authority. We do not endorse his theory that the function of bank reserves is entirely "dynamic": "the static law of bank reserves is that none are needed."

The characteristics which we have attributed to the work as a whole are noticeable also in that part of the work to which we would direct the reader's special attention: Part II, in which the quantity theory of money formulated by Professor Irving Fisher is disputed. Here, too, the facts appear to us more important than the theory. The higher theory of statistics which deals with index numbers seems to be ignored when it is asked, with reference to "T," the denominator in Professor Fisher's expression for the price-level, "how does one sum up pounds of sugar, loaves of bread, tons of coal, yards of cloth, etc.?" "T" is equally increased by adding a hundred papers of pins, a hundred diamonds or a hundred newspapers"—and so forth.[1] While we differ from our author's statistical reasoning we are almost indifferent about the logical issues for which he contends hotly, the questions raised in passages such as the following:—

"Rapidity of circulation, whether of money or of goods, is not a causal factor independent of prices, but rather in part depends on prices" . . . "the first change in the situation may appear in prices themselves" (Chap. VI.). "Particular prices can and do rise without a *prior* increase in money, or bank deposits, or change in the volume of trade, or in velocity of money or deposits, and also without compensating fall in other particular prices." . . . "The *cause* is with the prices." (Chap. XV.)

The statement last cited refers to the following clean cut apophthegm:—

"Suppose we assume a combination of employers of maidservants which forces down the wages of maidservants from $20 to $10 per month. . . . The masters now have $10 a month each more to spend. . . . The maidservants now have $10 each less to spend. . . . These last two changes exactly neutralise one another. The first change, in the price of domestic

[1] See on this and other points connected with the attack on Professor Fisher's theory *Currency and Finance in Time of War*. By the present writer.

service, remains unneutralised. The general price-level is, then, lowered by a cause acting from outside the equation of exchange directly on prices."

Commenting on this example, our author well says "the equation is kept straight by a reduction in velocity." He had better have said no more. When he goes on to locate the cause of the fall in the price-level we are reminded of a reflection made by Jowett in a lecture on ecclesiastical history: "How much effort has been wasted in attempting to answer questions which ought never to have been asked!"

We come to something more tangible when Professor Anderson instances cases of barter which are not taken account of in the equation of exchange constructed by Professor Fisher. There is barter in its simplest form, expressed in advertisements of the type: "Wanted to trade a well-trained parrot for a violin." Again, there is the practice of taking as part payment for a new sewing-machine or automobile the similar thing which the buyer is discarding. A more important case of (virtual) barter is formed by the stock and produce exchanges, by means of which the use of money is greatly economised.

The omitted transactions appear to us to be of a magnitude which relieves the equation of exchange from the imputation, sometimes attributed to it, of being an identical proposition. On the other hand, the omissions are not so serious, but that they may be, so to speak, jumped in the inductive leap from the known to the unknown. A wider chasm is disclosed when it is alleged that the transactions which occasion the flow of (credit) money designated by $M' V'$ are for the most part not of the kind contemplated, not of the species represented by items in the volume of business, T. The huge total of about a billion dollars, 200 million pounds, per day is said to be made up principally of cheques, drawn in the course of speculative sales and loans between brokers. A "morning loan" may occasion the creation of three or more cheques. "Cheques fly about recklessly in Wall Street, and men will turn over money many times if an eighth of 1 per cent. or less can stick by the way on a good sum" (Ch. XIX.). If this account of the ingredients which go to make up the monetary flow is accurate, it certainly seems *primâ facie* that some alteration, not indeed in the principle, but in the details, of Professor Fisher's calculation is required. But our readers may be advised to suspend their judgment until they hear the other side.

F. Y. EDGEWORTH

Principles of Money and Banking. A Series of Selected Materials, with Explanatory Introductions, by HAROLD G. MOULTON. (Chicago: The University Press. 1916. Pp. 283 + 502.)

Readings in Money and Banking. Selected and adapted by CHESTER ARTHUR PHILLIPS. (New York: The Macmillan Co. 1916. Pp. 845.)

PROFESSOR MOULTON attempts to combine in one volume the uses of a formal text-book and of collateral readings. He appears to us to have obtained a large measure of success in this attempt. He has avoided what he calls the "dogmatic tendencies of the text-book method," ill-adapted to a dialectical subject such as political economy. Indeed, his experience as a teacher even leads him to think that a text-book had better not be used by students of these selections. He hopes to retain the suggestiveness of collateral readings without their usual bulkiness and admixture of irrelevant material. This advantage is obtained at a certain cost when it is necessary to "adapt," in our author's phrase, an extract from a classic. For example, with reference to "reasons for debasing the standard" we have a piece adapted from Hume consisting of three paragraphs. The last paragraph consists of the well-known passage in which it is said that "when money begins to flow in greater abundance everything takes on a new face . . . and even the farmer follows his plow (*sic*) with greater alacrity and attention." The first paragraph, referring to the "operations of the French king on the money," occurs in Hume's essay later by about a page than the passage about the new face. The second paragraph in Professor Moulton's version is taken from one of Hume's notes. The editor has put together these *disjecta membra* very skilfully. He restores organic unity like the surgeon who welds together portions of a fractured bone with a piece of bone taken from some other part of the body. The loss of literary form is thus reduced to a minimum. It is fully compensated by the abundance of matter for which room is thus made.

It would be impossible here to illustrate adequately the variety of topics presented in this series of excerpts, which number nearly 400, occupying on an average each about two pages. We should mention particularly one subject to which our author directs special attention in his Introduction. He remarks that the discussion of banking is usually too much confined to such banks as create media of exchange in the form of notes and cheques. "Over-

emphasis on the demand nature of the deposit has too frequently been accompanied by an under-emphasis, if not a total ignoring, of the actual uses to which the funds borrowed on short time are devoted." Accordingly, several "readings" are adduced to illustrate the *rôle* played by the "investment banker" or financier in modern business. Under the head of "Investment Banking Institutions" savings banks (A) and investment banks or bond houses (B) are distinguished. Under heading A there are ranged thirteen pieces—the one on the *liquidity needed in savings bank investments* appeared to us particularly interesting. It seems to be the opinion of experts that every such bank should have a good percentage of its funds invested in readily convertible securities. The bond business is of enormous magnitude. It appears that nearly $2,000,000,000 of bonds are marketed annually in the United States. A "bond" in this connection is well described by Theo. H. Price as an instrument of credit which "provides a means whereby the immobile or undeveloped assets of a deserving enterprise may be pledged to secure the money which should be used to extend still further the field of beneficent activity." "It is the gift of imagination and the quality of constructive optimism that differentiate the banker from the moneylender." "The great bankers control the water-gates through which the public money flows to irrigate the fields of industry."

In this connection we should like to have had the views of experts upon the corresponding institutions—whether or not called banks—in this country. But the author has not been able to find room for the banking systems of Europe. Foreign exchanges and the controversy as to the relation between the quantity of money and the level of prices have likewise been excluded by the limitations of space.

Professor Phillips's *Readings* are, in some respects, complementary to Professor Moulton's selections. Treating his topic somewhat less exhaustively, Professor Phillips is able to cover more ground. Thus the banking systems of several countries, Canada, England, Scotland, Germany, South American countries, form each a separate chapter, each chapter containing extracts from several authorities. Again, foreign exchange has a chapter to itself; a chapter consisting of sixteen excerpts. There is a symposium on the relation between money and general prices based on the proceedings of the American Economic Association, 1910. We may notice Professor Carver's acute remark that if an increased demand for agricultural products should be attended

with an increase in the marginal cost of production, a larger supply of money would be required. There is also a chapter on index-numbers, consisting of the article on that subject in Palgrave's Dictionary.

Professor Moulton, like Professor Phillips, has to make room for many things by omitting much. The omissions seem to have been made judiciously. Thus, with reference to the Federal Reserve system, Professor Sprague's article in the *Quarterly Journal of Economics* (1914) is cited with the omission of one section, that on "Clearing Functions," the one which can, perhaps, best be spared, as dealing with somewhat problematic questions relating to the future. It would be hard to say which author skips most skilfully. Thus, in the racy extracts from Eggleston's *Recollections as to the Confederate Currency*, both writers retain the statement that gold was at a 12,400 per cent. premium. Both reproduce the epigram, "Before the war I went to market with the money in my pocket and brought back my purchases in a basket; now I take the money in the basket and bring the things home in my pocket." But Professor Phillips omits the anecdote of the cavalry officer who inquired the price of a pair of boots. "Two hundred dollars," said the merchant. A five-hundred-dollar bill was produced, but the merchant could not change it. "Never mind," said the cavalier, "I'll take the boots anyhow. Keep the change." On the other hand, Professor Moulton does not include the physician, who would order from a planter whom he was visiting "ten or twenty visits' worth of corn." "The visits would be counted at ante-war rates, and the corn estimated by the same standard."

We hesitate which of the two versions to prefer; and more generally which of these useful compilations most to recommend to students and teachers. F. Y EDGEWORTH

War Finance. By J. SHIELD NICHOLSON, Professor of Political Economy in the University of Edinburgh. (London: P. S. King and Son. 1917. Pp. xxiv+480. 8vo. Price 10*s*. 6*d*. net.)

As Adam Smith "always carried his cane on his shoulder as a soldier does his musket," so Professor Nicholson "in the present disturbances" always wields his pen as a sharp and shining sword. Here he urges us on, there he waves us back to rectify our position. He exhorts, he warns, almost he denounces, ever in the thick of it and concentrating upon the things that matter,

never in doubt whither we should go, making equally clear the objective and the reasons why we should take it His collected war papers now published stir like a trumpet, and with no uncertain sound. He is not out for any academic or dialectical triumph, but offers definite counsels of policy on war finance. Those who agree with him will be glad to find their views so trenchantly and elegantly stated. Those who differ have yet to find a champion who can do more than scratch the armour of so doughty a challenger.

The volume falls into two parts. Part I. contains the longer pieces, which have appeared in the ECONOMIC JOURNAL or been noticed in its pages. Part II. consists of forty-three articles contributed to the *Scotsman* between August 3rd, 1914, and July 25th, 1917. The second part will be new to most of our readers. It is possible, and, indeed, too frequent in practice, for writers on war finance to be non-committal, definite only in platitudes and generalities, and safeguarded by proviso against refutation by future developments. But this is not Professor Nicholson's way. Every article has, as the Americans say, a punch in it. That it should be possible after more than three years to reprint these articles without change or need of change, and to claim that "the dangers foretold of the neglect of well-tried economic principles have been only too fully realised," is striking testimony of their permanent and practical value. But "any satisfaction that might be felt in the accuracy of the forecast in these papers is overwhelmed by the fear that even now the warning from the past will not be heeded." In their present form the articles will secure a wider audience and render still greater service to the public.

In the vigorous Preface added to the papers the author summarises his indictment. The main charges against our financial policy are inflation, extravagance, and a careless opportunism. "In the actual conduct of the war we have acknowledged and amended great mistakes: witness the Dardanelles and Mesopotamia. In diplomacy also we erred, repented, and reformed. . . . But in regard to our economic and financial policy no mistakes are admitted. We speak with the complacency of a heathenish Turk of war prices and war extravagance and *backsheesh* as if they had been inevitable. Granted, that from a balancing of various causes some rise in prices was probable and some extravagance unavoidable, it is foolish to say that none of the causes are under human control, and that we must go on in the way we have begun. In economic affairs everything turns

on degree. . . . We have to steer between the too much and the too little."

The argument, in a word, is that Government has struck the snag of "too much." Its emergency measures have gone too far and been continued too long. It has paid too much for the use of capital and for the services of labour. The war bonus has spread like an ill weed over every field of the nation's activity. Capital in all its forms has had its bonuses and its anarchic freedom no less than labour. "Let us beware lest we have to invent an English word for *Sovietism.*" "In a war for national existence the rule ought to have been that for every kind of service required the State should pay less than in peace time—the difference being put down to patriotism." More vigorous taxation is required above the minimum of efficiency. The argument that an internal national debt is no real national burden is a fallacy. Debt is to be thought of as deferred taxation.

These quotations and paraphrases are selected as samples: but the *Scotsman* articles cover a much more varied field of topics connected with war finance. Professor Nicholson tells us that he re-wrote many of the articles five or six times in the search for the right combination of judicial fairness with practical emphasis. If he has failed anywhere in striking the golden mean between too much and too little, it seems to the present writer that somewhat too stern a view is taken of the claims of labour. Whether, as is commonly supposed, manual workers and their families are a great deal better off than in peace times is not proven. Here is the mother of a family who goes out to make munitions. Her nominal earnings are high. But she has perhaps to pay one old woman to stand in the queues and do her shopping, to feed and pay another to mind the house, look after the children, and do the cooking. The housekeeping is neither economical nor efficient. She has no time to make or mend or wash the family clothes. She must go oftener to the draper, the hosier, and the tailor, and pay a laundry bill. Day by day she must dip into her purse for train or tram fares and for "meals out," and the *Labour Gazette* figures of the increase in the cost of living by no means give the whole of the story. The war figures are serious in their total where the peace figures are zero. Patriotism alone spurs her to continue exhausting labours, the net advantages of which in money and comfort are often small and sometimes negative. This is one extreme. At the other, no doubt, the boys and girls (the "flippers" and "flappers," as Dr. Cannan calls them) have money to burn. But they have

neither votes nor organisations to extort hard bargains from Government or from private employers, and if the urgency of national needs calls for every ounce of effort we must face the cost as we face the expense of munitions. Some expert investigation of complete family budgets in war time is badly needed. My own inquiries lead me to believe that the working classes generally profit far less than is supposed from their high wages. Certain skilled workmen, we must remember, are not allowed to go to the front, or to stay there when they are wanted for war work at home. If they are to take more out of themselves than in peace time they must put more into themselves, and the extra food must be reckoned in addition to the rise of price. To pay them less than in peace time would diminish the output even of the most willing. A demand for higher wages is not necessarily unpatriotic. The drudgery of prolonged work in the factory is not always preferred to life in camp, which has its compensations of cheeriness and variety. We may fairly enter a plea for suspense of judgment upon the unreasonableness of labour in the lump.

But the volume must be read and re-read for its cumulative effect. Insistent denunciation of inflation in all its forms runs through it like a connecting thread; but it touches every aspect of war finance, and whatever it touches it illuminates and adorns. In this great crisis the author must be counted among those who have served their country well, and given it of their best.

HENRY HIGGS

Agriculture after the War. By A. D. HALL, F.R.S. (John Murray. 1916. Pp. 131 and Appendices. 3*s*. 6*d*. net.)

THIS book is now familiar to many persons keenly interested in the economic and political problems connected with the cultivation of land; but it ought to be read by all economists who deal with these problems, as probably most of them do in these days. The importance of the book is scarcely at all diminished by the fact that one of the most important of the subjects it deals with has been the subject of legislative action. From some points of view, indeed, the importance of the work has been increased by this fact. Mr. (now Sir) A. D. Hall is primarily an agriculturist and his insistence on the idea that education and experiment, scientific and commercial, will have at least equal influence on the future of agriculture with some of the more direct State actions, like guaranteeing prices, is particularly necessary now some of the direct State actions advocated have been taken.

Although the volume is small, it is extremely catholic in both subjects and their treatment. This catholicity has its own drawbacks, for in some instances Sir A. D. Hall is rather in the position of the small boy who has picked up a dirty apple, and whose hunger impels him to eat it while his self-respect impels him to throw it away; and sometimes one thinks he would eat more or bite more voraciously if it were not for the people who appear to be watching.

The starting-point is that "whether we like it or not the possibilities of war have definitely re-entered our scheme of existence, and the consequences of war will depend upon the clearness and forethought with which we prepare for it in our social organisation." This may be true, or it may not. Many Englishmen are taking up this attitude, while others are hoping, with more or less confidence, that this will be the last European war of any magnitude. But whichever view is best founded it will be advisable to examine some of Sir A. D. Hall's statements and theories. He deals with the dependence of the United Kingdom upon imported foods and concludes that this "constitutes a source of weakness to the nation in three directions": (p. 13)

(1) Through absolute danger of starvation, or of such limitation of supplies as will raise prices to the point of creating an internal crisis.

(2) By the withdrawal of our naval power from its offensive function to that of guarding the trade routes.

(3) Through the reduction of the national credit by the necessity of paying such large amounts, which are materially increased in war time, to foreign producers.

On (1) it may be said that Sir A. D. Hall is not asking that the United Kingdom should become self-supporting as regards food. He thinks that: "To produce our own food may be a vision; I would prefer to regard it as an ideal towards which to work, confident that every step we take in that direction is an addition to the strength and stability of the nation" (p. 98). The striking fact is that the United Kingdom has run the greatest dangers of starvation or internal crisis on food questions when the country was most nearly self-supporting as regards foods; and that as the sources have become more numerous and varied the supplies have become more certain and regular. This might not be the case again with increasing maritime dangers to supplies. But as it is more probable that such future wars as may occur will be fought on foreign fields than in the United Kingdom the question may be asked how much more naval power would be required to guard

the food trade routes than would be actually necessary to guard trade routes for other materials, convoys of military material, and to defend our shores? Only one conversant with naval matters could answer, but it appears that while a good deal of maritime transport would be required for both military and civil needs the addition of the duty of guarding food ships would not entail any extensive reduction of the naval power of offence. On (3) it may be said that there is great danger of loose thinking, for the question of man-power is involved with financial credit. We import food of a certain value, and if we export goods of equal value which we can produce with as little man-power as we should require to produce the amount of food imported, the advantages of home production and importation are equal (so long as supplies are certain). But should we be able to produce the exports which pay for the food imports with less man-power than would be required to produce the imported food there is a distinct saving of that essential of national power in defence or aggression. If we do not produce sufficient exports to pay for imports, but have enough accumulated wealth to meet the difference, there is a greater saving of man-power. Our ability to pay for part of the imports by accumulated wealth for at least some time is largely the result of the high productivity of British industry having provided a considerable margin for saving. And should the application of a greater proportion of the productive agents of labour and capital to agriculture lead to lower total production the financial position would be weakened while the amount of man-power available for purposes other than agricultural production in time of war would be less than at present. While supplies can be transported we have the advantage of the use of the man-power of the food-producing countries, whether we pay in exports which we can produce more easily than we could produce the food, or whether we pay partly out of our accumulated capital.

It is necessary to say this although one may heartily agree with the present policy of increasing the home-grown supply of food for the period of the war. Also, it might be advantageous to curtail the necessity for exports of such raw materials as coal by reducing the imports of food, so long as the increased amount of food required to be produced at home can be economically provided. However, with a population of 46,000,000 on a cultivated area of roughly 47,000,000 acres enormous advances in technical knowledge and methods will be necessary before we can approach, much less reach, the condition of self-sufficiency without wasting our man-power and perhaps becoming a second-rate State. Under the

best conditions an attempt to become self-supporting might entail the adoption of practically a vegetarian diet, besides throwing the country open to the danger of relying upon food produced on a small area which may be very adversely affected by climatic conditions in any single year while none of the organisation of trade existed to bring in supplies. This was one of the weakest points in national organisation during the Revolutionary and Napoleonic Wars. At the same time, every increase in agricultural production which can be secured by sound methods which yield as good a return for the employment of capital and labour as any other industry is desirable. There is no one better fitted to guide the nation on the technical and educational aspects of the problems of methods of improving production than Sir A. D. Hall; and the sections of the book dealing with the capacity of land for food production, arable *versus* grass, agricultural education, reclamation of land, the functions and duties of landowners and farmers, large and small farms, are admirably clear and very stimulating. These sections cannot be summarised with justice in the space at our disposal, and they deserve to be read more than once.

The chapter on the "decline in British agriculture" might have had a rather more specific title. Ireland is not mentioned, the treatment of Scottish agriculture is scanty, and the chapter deals mainly with conditions in England. This is inevitable, because it is in England and Wales that the chief decline has occurred. If there has been any decline in the productivity of Scottish agriculture during recent decades it has been comparatively slight, and it may be difficult to prove that any decline has occurred. Indeed, the study of the reasons for the practical maintenance of the productivity of Scottish agriculture, while that of England has declined, at any rate to some extent, might throw some light upon the demand—mainly of English origin—for some form of State protection or financial assistance. There is also another point: that whether total production has declined or not, it is fairly certain that production per man has increased during recent years, and this has made possible an improvement in the condition of the most numerous class of agriculturists, the farm labourers. Both in Scotland and England each man engaged now manages more land and stock than in 1871, and although accurate information on production at different periods is non-existent, it is safe to infer that production per man has increased with the increase in the amount of land and stock managed by each. But, while it would be impossible to reach general agreement with Sir

A. D. Hall on many points raised in this book, everyone interested in land problems should be grateful for the fair and clear statement of his case for State assistance for agriculture, and for the expert guidance on technical and educational matters.

A. W. ASHBY

The Land and the Empire. By CHRISTOPHER TURNOR. (John Murray. 1917. Pp. 136.)

British Agriculture: The Nation's Opportunity. (Being the Minority Report of the Departmental Committee on the Employment and Settlement of Soldiers on the Land.) By E. G. STRUTT, LESLIE SCOTT, and G. H. ROBERTS. (John Murray. 1917. Pp. 168. 3*s*. 6*d*. net.)

A LARGE part of Mr. Turnor's little volume is devoted to statistics and graphical representations of statistics; and to criticism of the political economist. It would be difficult to find anywhere so much lack of understanding and fallacious treatment in so little space. It is essential that when figures are used the range of their application should be carefully defined. Mr. Turnor states that "a working capital of about £7 an acre is probably the average for the United Kingdom, while on the Continent it varies from £12 to £15 an acre, and even more." Presumably, Mr. Turnor is not referring to "the Continent" in its general sense at all, but to Denmark and Belgium and to selected parts of Germany, France, and Holland. If this is not the case, the figures need a good deal of substantiation. Again, sweeping general figures which indicate unexpected conditions need critical examination and an exhibition of their foundations. Mr. Turnor states that "the gross rental of agricultural land is about £40,000,000 a year. Of this, some £17,000,000 are expended every year in the upkeep of the farms." This sum for upkeep represents 42·5 per cent. of the total, which appears to be an extraordinary proportion. A good deal of evidence could be produced to show that upkeep does not cost anything like this proportion of rent, and that where such proportion is expended it is due to absence of economy. It is a common fallacy to take a set of figures for stock kept on farms and then assume that this indicates production. Mr. Turnor provides a table showing the number of cattle per 100 acres on holdings of various sizes in Germany to prove that more stock is kept on small than large holdings, and then states that "a study of the *yield* of small holdings in France shows the same results." He even states

that "until recent years we had to rely for statistical proof of this controversy of large and small holdings upon figures obtained from the Continent"; and then quotes for British data only the figures from a small area in Cheshire, which are themselves open to criticism. In 1885 the Agricultural Department of the Privy Council collected statistics on this point (see Cd. 4848, 1886), and with a very little trouble figures similar in character to those used by Mr. Turnor can be obtained for this period. For 1907 similar figures are available in the *Report of the Agricultural Output of Great Britain*. So far as they go, these are as good as the German figures. Here is a comparison of Mr. Turnor's statement and figures obtainable from the volume of Census of Production above mentioned :—

Germany. Size of Holdings. Acres.		Cattle per 100 acres.	*England and Wales.* Size of Holdings. Acres.	Cattle per 100 acres.
5 to 12½	...	34	1 to 5	26
12½ „ 50	...	26	6 „ 50	29
50 „ 250	...	19	51 „ 300	21
250 and over	...	10	301 and over	14

But the number of stock kept is no criterion of total output, for in England and Wales the proportion of arable land rises as the number of cattle per 100 acres falls with the increase in size of holdings, and the output of other products rises as the output of stock products falls. Even when the number of stock per 100 acres is similar, it does not follow that rate of output will be the same.

Such criticisms might be extended, but some matters of principle are of more importance. Nearly every table and diagram is devoted to the suggestion that the production of our agricultural industry is too low; and the assertion is made that "the rate of production with us is about £4 per acre, in Belgium it is about five times as high—£20." This may be true, and yet we might make a mistake if we tried to raise our production to the Belgian level. It never occurs to Mr. Turnor that the rate per acre is not the only criterion of production. There are three standards which must be applied in any judgment of the results of a system of agricultural production: (1) rate per unit of land; (2) rate per unit of labour; (3) rate per unit of capital. The neglect of any one of these may lead to false conclusions and to grave error in any policy of reform which is based on the results of the examination. So far as is known, the production per man in England is as high as in any other European country except Denmark; and if the Eastern counties are considered as one unit the production per man in that area, where soil and climate are

somewhat similar to those of Denmark, is nearly as high as in that country. However, the general point is important, and those who are interested should see a recent note in this JOURNAL (March, 1917) on some of Mr. T. H. Middleton's German figures, also Mr. C. S. Orwin's *Determination of Farming Costs*, and Part V. of the *Agricultural Statistics*, 1912 (Cd. 7271, 1914). On the rate of production per unit of capital in various countries there is very little reliable information, but there is reason to believe that the English system compares favourably with others in this respect. At any rate, it is worth while considering that the earnings of persons engaged in agriculture are generally higher in Great Britain than in any other European country. Earnings of agriculturists are higher than in Great Britain only in those new countries in which the ratio of labour to land is lower than in this country. The return of output per man and per unit of capital determines the standard of living for cultivators and employees, and no system which fails to give a due return for labour can succeed in inducing the population to enter or remain in an agricultural occupation while other occupations are open. No system which fails to give a true return to capital can attract capital while other investments are offered. The great attractions to British labour and capital are urban industry and colonial development, because there the returns to labour and capital are higher than in our agriculture.

Here another point raised by Mr. Turnor is of great importance. It is that of the law of diminishing returns. He criticises the economists who put forward this law as a reason for not attempting to reach the maximum of production from a given area of land, and says that "they have no practical knowledge of the productivity of land." But if he will read some recent works of the economists, notably Mr. Clay's *Economics for the General Reader*, he will find a much more comprehensive consideration of the law and the qualifications which arise than any he has given. He quotes Sir John Lawes's work in the conquest of natural forces as an example of the type of qualification that is necessary, but he forgets that Lawes was one of the strongest and best-informed supporters that the law of diminishing returns (as applied to agriculture) ever had. Also, Mr. Prothero recently put a strong case for the law in the *Edinburgh Review* (October, 1915). Surely Lawes and Prothero have some practical knowledge of the productivity of land! Still, Mr. Turnor is right when he lays emphasis on the present possibility of securing increasing returns on many farms. He only fails to realise the true

theoretical and practical position of the tendency to diminishing returns. He is in a weaker position when he deals with rent (p. 36), for he shows a complete lack of understanding of the theory of "differential rent." Nor will his theory that in agriculture the tendency of organisation is from large- to small-scale production bear examination with reference to all the available data. There is an essential difference between the movement from small workshops to large factories which is not especially fostered by any State or social action and that from large farms to small holdings for which all the machinery and power of the State are used. Indeed, as in England, the machinery of the State does not always succeed in stopping the movement from small to large holdings. From 1908 to 1914, 12,584 holdings were created, but the total number of holdings under 50 acres increased only by 2,513, and the area under holdings of this size actually decreased to the extent of 95,000 acres! Some of the practical suggestions made later in the volume are fairly sound, but they are not altogether the outcome of the author's collection and examination of facts.

The second volume contains, besides the Report of the Minority of the Departmental Committee on Settlement and Employment of Soldiers on the Land, an essay of fifty pages by "Free Trader" on "The Policy of the Plough"; a contribution of sixteen pages by Mr. A. D. Hall on "Reclamation of Land"; and a short Addendum of twelve pages on "Agricultural Organisation, Housing, and Village Life," by the signatories of the Report. The essay by "Free Trader" strikes the reviewer as the work of one who has, somewhat sentimentally and unnecessarily, forsworn his faith. Naturally figures play a part in this essay. These are mostly drawn from Mr. T. H. Middleton's *Recent Development of German Agriculture.* Now the German agricultural policy was dictated partly because agriculture was regarded as one aspect of the means of martial defence or aggression. When this reason for a policy is adopted, means which are essentially uneconomic under ordinary industrial conditions can be sanctioned and the loss involved cheerfully faced. But Germany had no large colonies mainly devoted to the production of food for the consumption of a white population with which to maintain trade. Had this been the case, her agricultural policy would probably have been very different from the one she adopted. And English Free Traders will do well to consider the effect on the colonial economic and political situation before they lend their support to the policy of securing maximum gross production

from the land of the United Kingdom. For every unit of food Britain fails to import Canada and Australia must find another market, or cease to produce that amount. For every unit of manufactured goods these countries fail to buy in Britain, because they cannot exchange their food products, they must buy elsewhere or produce for themselves. The gross production of the colonies will not remain stationary, and every decrease in trade with Great Britain will necessitate an increase in other directions. There must be either a movement of population from agriculture to manufacture to sustain the balance of a home trade; or an increase in foreign trade with other countries. It appears that Germany and the United States will be two of the increasing markets for food within the next generation, and it would be a strange result of a new agricultural policy in the United Kingdom if, on one hand, it fostered trade between these countries and the new countries of the British Empire, or, on the other, made the new countries of the Empire commercially self-supporting. Mutual trade has been one of the strongest Imperial bonds, and with the growth of new trade conditions or relations there is a possibility of new political tendencies. The political development of the Empire may or may not be permanently affected by emotions which are now general, but economic considerations are apt to carry more weight, and have a more permanent influence, than social emotions, and these possibilities are worthy of consideration.

It is true, of course, that if population were transferred from urban industry to agriculture within the United Kingdom the consumption of the agricultural classes would increase; but it does not follow that this increase would be in proportion to the total increase in agricultural population, or that total national production and trade would be the same after the transference as before. Should the production per man in agriculture be less than in urban industry, or the production per man in British agriculture be less than that per man in colonial agriculture, total production and trade will inevitably fall. For instance, if the value of production of a man engaged in urban industry is £150 per annum and he is transferred to agriculture under a system in which he will produce only a value of £100, production, consumption and trade, as regards each man so transferred, will fall in the ratio of one-third. And it is known that value of production per man in agriculture is lower than that per man in many urban industries in Great Britain. The four great elements of defensive power are man-power, industrial productive power, food,

and finance. We may easily weaken our defensive power at two points—industrial production and finance—by an ill-considered policy of agricultural production, to say nothing of the possibility of weakening Imperial ties.

The argument on the amount of production per man so far leaves out of consideration the nature of the goods produced—or the relative necessity for producing them. There is no doubt whatever that there is a necessity for an increase in the amount of food produced nearly all over the world, and especially in the United Kingdom. However, this does not mean that the resources of civilisation are so poor that in order to increase the margin of safety in regard to food supply the population must be prepared to reduce its production and consumption of other necessaries. Nor is the argument to be regarded as a plea against attempts to develop our agricultural system or to increase its production. This can be done on sound and economic lines, but methods must be considered in relation to all the relative data available, and on broad Imperial lines. Eventually the only method of securing increased production economically is the application of all scientific and mechanical knowledge which is available, and by gaining new knowledge of methods of conquering natural forces where this is required. The economic success of even such measures as guaranteed prices eventually depends upon the extent to which they succeed in inducing farmers to adopt improved practices, for a continual subsidy to agriculture means a weakening of national resources in other directions.

Some of the recommendations of the Minority of the Committee, such as guaranteed prices and the regulation of wages, have been embodied in legislation; and others are still worthy of consideration. The possibilities of land reclamation are still large, and the means of development of agriculture by education, by the illustration of the value of business methods and organisation—in other words, by the application of scientific and business knowledge—are still waiting to be exploited. And these are, after all, the only methods of securing continued advance. There is reason to believe that the present campaign for increasing production for the period of the war is opening the minds of those in control of the industry to new and great possibilities. But it remains to be seen whether these will be sufficient to attract labour and capital to the land on a self-supporting basis, or whether some form of permanent subsidy will be required.

A. W. ASHBY

The Determination of Farming Costs. By C. S. ORWIN. Pp. 144. (Oxford: The Clarendon Press. 1917. 5*s*. net.)

THE Director of the Institute established recently at Oxford for Research in Agricultural Economics has published an informing study at an opportune moment. It will, we believe, give a powerful, beneficial impulse to the thoughts and acts of enlightened landlords and capable tenants. Nor, we may add, should this exhaustive review of results obtained from scrutiny at the Institute of tabulated records kept by a few keen farmers in different parts of the country prove of little use to others. Such, we think, are those responsible for the administrative action of the Government Departments concerned with rural life, and those ambitious to inspire and guide popular opinion in its quest for legislation on agrarian affairs. The work accomplished and presented in this volume has been, we must remember, conducted within the strict limits set, and under the extraordinary conditions peremptorily imposed, by the distressful period of costly world-wide war through which we are passing. It is the promise of the future in this matter, as in others, rather than the achievement of the present to which we look with hope and confidence. But we can nevertheless accept without reserve Mr. Orwin's contention in his final chapter. We will quote his words. He there says: "Not only should a familiarity with farming costs be essential to individual farmers in the direction and development of their own management, but the ability to compare the experience of many individuals is of fundamental importance in the framing of national policy. At the present time far-reaching reforms are under discussion, and the introduction of new factors in production is being urged, none of which can be stated or considered scientifically without access to reliable statistical matter upon which to base the proposed changes."

He cites as illustrative examples the legislative guarantee of a minimum price of wheat and the debated question of the size of holdings. In both matters the "determination of farming costs" is obviously desirable or necessary as a preliminary to an intelligent handling or a correct solution; and, similarly, the banking world is likely to be more ready to lend the capital, which, available on reasonable terms in sufficient quantity, would assuredly help materially all kinds of agricultural enterprise, as it assists trade and manufacture, if the practice of accountancy becomes an integral part of farming management. The cogency of such considerations is indeed irresistible. Mr. Orwin is, we hope, forcing an open door when he pleads in his general intro-

duction that the farmer of the future must, or should, adopt and maintain approved business methods. Of these the keeping of accounts, for the purpose of ascertaining costs, is, we agree, elementary. The use of scientific knowledge, placed more fully at disposal by recent experiments in laboratories and on farms, and popularised through more active effort in instruction and advertisement by the central government or by appropriate local bodies, may rightly be considered indispensable to continued success in cultivating land for cereals or for grasses and in rearing the different varieties of live-stock. But it should also be accompanied and directed by more regular systems of buying and of selling; and the general business of production in the primary industry of the country should proceed on the lines and use the methods and the instruments which have won recognition by their merits in prosperous manufacture and remunerative trade. We now need in fact once more the assiduous enthusiasm of an eloquent evangelist like Arthur Young who will discourse as that indefatigable tourist did, in reiterated sermons up and down the countryside. But his text should be "Farmers must keep accounts."

By the full bibliography which he has furnished Mr. Orwin shows that the literature of the subject is larger than we had thought; and it exhibits signs of continuing vigorous growth, for which our author himself, by writing previous to the present book, has, as we note, been responsible in no small degree. He disarms our criticism now by the frank admission that the work which he and others have done in this matter at the Oxford Institute is "still at the beginning." It has not, he remarks, "yet reached the stage at which generalisations can be made." Nevertheless, we are sure that he is right in his contention that it is important to have "in a number of cases an exhaustive and scientific analysis of farming costs"; and he is, we are confident, no less correct in his conclusion that, "if this can be done in a number of typical farms, the results will have a value as supplying standards of comparison." It is a commonplace of statistics that from a small number of select data large inferences can be securely and advantageously obtained if the samples submitted and examined are sufficiently representative. This kind of work has been tried here, and, in spite of the disturbance in the sequence, and reduction in the number, of the records occasioned by the war, the results obtained are so interesting and illuminative as fully to justify their presentation in this timely book.

The original task indeed of the account-keeping contemplated

may, as Mr. Orwin wisely allows, be, or seem at any rate to be, "unprofitable" to an "ordinary" farmer. The expense and trouble needed to ensure the desired end may appear, and may in fact prove, excessive in his case. But nevertheless he can, and will, benefit through the experience, industry, and outlay, in this direction as in others, of the more elect, wealthy, and enterprising of his brethren. We can readily conceive that Mr. Orwin and his collaborators see avenues opening by which opportune advice may be drawn from such records, kept by progressive agriculturists, and conveyed to the general community of farmers; and accordingly we hail him as a bold pioneer of promising exploration—such, in fact, as the Institute, of which he is Director, ought to initiate in fulfilment of the objects for which it was established.

L. L. PRICE

The Economic Development of Modern Europe. By F. A. OGG, Ph.D. (Macmillan. 1917. Pp. xvi + 657.)

IN this volume Mr. Ogg, the author of *The Governments of Europe* and *Social Progress in Contemporary Europe*, has dealt mainly with the economic development of England, Germany, and France in the nineteenth century. There is also a chapter on Russia and an introduction of 114 pages sketching European development prior to the nineteenth century. The book, with its leaded paragraphs, is obviously intended for the undergraduate rather than the teacher, and is not founded on original research, but aims rather at giving the results of the investigations of the authors of many specialised books and monographs on recent economic history. Any economic history written in English dealing with French, German, and Russian development in juxtaposition is welcome, and this is the least unsatisfactory book of the kind known to me.

Its main defects are twofold. There are no leading ideas which help the student to grasp the trend of the century as a whole, and a large part of the most important happenings of the nineteenth century are either entirely omitted or so subordinated as to give a one-sided impression of the period. There is practically nothing but stray remarks about banking, finance, colonisation, the growth of modern joint-stock trading, monopolies, and combinations. The nineteenth century, judging by the space allotted (two-thirds), seems to Mr. Ogg to consist chiefly of labour organisation, Socialism, and labour legislation.

The arrangement of the book is not calculated to help the

student to grasp each country's development. It would, in the reviewer's opinion, have been better had one country been taken at a time in all its aspects. Failing the national method, the history of the century, which divides itself for Europe quite feasibly at 1848 and 1870, might have been dealt with in periods, and an enumeration of the salient characteristics of each period would have helped the student to grasp the details of the general trend in each country.

As it is, one large section (123 pages) is devoted to Agriculture, Industry, and Trade in France, Germany, and England. Population and Labour is a second division, and Socialism and Social Insurance forms the third and last division—these two filling 298 pages.

Railways, which are certainly one of the epoch-making economic factors of the world, are relegated with canals and steamships to nineteen pages, and Mr. Ogg fails to give a true impression of the nineteenth century because he has not really grasped the fact that we live in a railway civilisation.

The last century was largely determined by two revolutions—the one industrial, the other commercial. The first hinges round the coming of machinery worked by steam power, which meant the development of coal, iron, chemicals, and towns; the other pivots on the fact that a new agency was introduced which enabled men to move masses of heavy things with ease and rapidity, and which made light of geographical obstacles. The industrial revolution could not have proceeded at the rate at which it did proceed unless railways and steamships had been developed to bring the vast quantities of coal and raw materials to the place of utilisation and to transport the finished goods; the canals proved themselves quite inadequate for the task. With mechanical transport at once punctual and swift, the trade of the world was revolutionised and the values of countries altered. Commerce was carried on in a new class of article, namely, the bulky and the perishable articles never before moved in quantities. Iron, steel, and coal supersede in importance spices, silks, and colonial goods, and food products, hitherto only moved at famine prices and in small quantities, form the basis of one of the great exchange businesses of the world. The railways effect the penetration of interiors and the abolition of geographical limitations. Hence Germany, a country hampered by a short coast-line and barred to the south by the Alps, becomes, when the St. Gothard is opened, a Mediterranean power and the great commercial factor in North Italy.

Hampered by the facts that her chief rivers flow north, and that traffic on them is impeded by ice and drought part of the year, Germany is yet enabled to become the exchange place of the Continent through her central position, which enables the railways to receive and distribute goods sent east, west, and south to the countries on her borders. Thanks to railways, moreover, the Central Powers can penetrate to Constantinople by land and trade with the Levant. The fact that railways penetrate interiors enables men to move in new countries from the coasts inland and to settle in parts remote from the river highways. Hence colonies, once a mere fringe of coast-line, develop into great continental possessions when once their bulky produce is transportable and they can obtain manufactures by rail. The result for Europe was a scramble for markets, the opening up of Africa, the struggle to control tropical products, and the great emigration of the European to fill up the Middle West of the United States and the continent of South America.

The economic history of Europe becomes, therefore, in the last quarter of the nineteenth century, the economic history of the world. All trade and economic policy is altered by the fact that transport has largely abolished distance, made new goods transferable and new populations mobile, and has given new values to continental areas. Of all this there is in Mr. Ogg's book no trace. Instead of describing the revolution which railways have wrought in the German economic position, he only says (p. 248) that in "no country has the advance of trade and industry been affected more profoundly by the development of facilities of transport than in Germany."

It is a considerable drawback to a text-book of this kind that the origins of the tables of figures are so rarely given. For instance, on p. 153 Mr. Ogg gives the figures of the coal mined in England during 1800–1913. The figure for the year 1850 is given as 49 million tons. On p. 144 he gives the figure for that year as 56 million tons. Which is right? There is no reference to the source. Where Mr. Ogg does quote his authority for his figures he sometimes takes them from another authority who equally neglects to state his sources for the figures quoted. Thus on pp. 162 and 357 reference is made to the work on *Industrial History* written by Mr. Perris, who, in his turn, gives no reference to the source of the figures in question.

There is a long bibliography at the end of each chapter, but it is very undiscriminating. For instance, in Chapter XIII., on "French Trade in the Nineteenth Century," the authorities given

include a book entitled *France in the Twentieth Century* (W. E. George), and following it comes Pigeonneau's *Histoire du Commerce.* Nothing is, however, said to indicate that Pigeonneau deals with neither the eighteenth nor the nineteenth centuries, but stops at Richelieu. It is, moreover, surely invidious when quoting English authorities to put Briggs' *Economic History of England* (reviewed on p. 404 of the ECONOMIC JOURNAL of 1915), which is a mere examinees' book, in the same category as a monumental work like Cunningham's *Growth of English Industry and Commerce* without indicating the different scope of each. Such indispensable tools of the economic historian as the *Statistical Abstract*, the *Annuaire Statistique*, or the *Statistisches Jahrbuch,* the fiscal blue-books and other standard Government publications, should also have been included in any bibliography of recent economic history.

I can conceive that anyone attacking economic history for the first time and using this book might consider economic history to be dull instead of being the most fascinating subject in the world. This is because the book lacks illumination. Nevertheless, the book is bound to be useful, as it practically has the field to itself.

L. KNOWLES

Economic Conditions, 1815–1914. By H. R. HODGES. (London: George Allen and Unwin. 1917. Pp. 91.)

WHOEVER advised Mr. Hodges to publish his essay in its present form did no true service either to him or to the general public. A dissertation may well be deserving of a college prize (this obtained the Carl Philip Reitlinger Prize in the University of London in 1915) and yet be quite unsuitable to be published in book form without much alteration and expansion. This essay, whose contents correspond but ill to its ambitious title, is inadequate in every direction. The sketch of economic conditions in 1815 is not based on any real research into original sources of information; a tiny fragment of the ground is covered in an utterly perfunctory manner, and the omissions are so glaring as to render quite valueless the picture of England, whether at the beginning of the nineteenth or of the twentieth century. The writer's equipment in respect both of historical knowledge and grasp of economic theory does not seem equal to his task. The few facts and figures for which he is able to find space are not brought into relation to one another, nor is any attempt made

to measure the relative significance of the different changes which have taken place.

A few examples will give point to the above criticisms. Half a page is devoted to trade unions; no figures are given of their growth and membership, and they are only cited as organisations which are hostile to trade-mobility! No mention is made of co-operation in any of its forms or of friendly societies and voluntary thrift. National insurance receives one line. The significance of the development of the economic activities of Government is ignored, save for a few figures showing the increase in national expenditure. No data are provided showing the growth of capital and income since 1815, nor is any estimate made of the effect which the economic changes of the past century have had on the distribution of wealth. In the chapter entitled "Remuneration" there are no details of wages in the different industries, and the writer has been content to reproduce some general index numbers of wages from writings by Mr. Bowley and Mr. G. H. Wood. Such omissions speak for themselves. The diagrams in this book merit a word of criticism. They are for the most part drawn in so slovenly a manner and the basis on which they are constructed is so carefully concealed that they defeat their own object and merely achieve obscurity.

C. W. GUILLEBAUD

Commerce and the Empire: 1914 *and after.* By EDWARD PULSFORD. (London: P. S. King and Son. 1917. Pp. x+248. Price 7*s*. 6*d*. net.)

MR. PULSFORD, writing in Sydney, complains vigorously of the disadvantage Australian statesmen are under in any controversy owing to the length of time which has to elapse before they can reply effectively to arguments put forward by writers in this country or Canada, but he has managed to produce a very timely contribution to the discussion of future fiscal policy. His book is not well arranged or well proportioned, but he strikes out with energy and makes many hits in his attacks upon the scheme of inter-Dominion preferences. In 1911, he tells us (p. 151), the South Africans calculated that their goods were receiving, under the preference arrangements, rebates amounting to £6,745 in Australia, New Zealand and Canada, while South Africa was giving rebates amounting to £62,093 on goods coming from those Dominions; and he remarks with justice that calculations of this kind are likely to be a

disruptive force. New Zealand, as he records, has actually made arrangements by Act of Parliament for the reduction or abolition of duties under preferential arrangements "to an extent that the estimated revenue so remitted shall equal as nearly as possible the remission" made by the other party to the agreement. He asks us to imagine the difficulties when changes take place and what was equal at the beginning ceases to be so. A Conference of Australian Chambers of Commerce held at Hobart recommended that Canada and New Zealand should adopt reciprocity "with a due regard to the protection of the individual States," ignoring the fact that the very essence of reciprocity is disregard of protection. On the whole inter-Dominion part of the policy of Imperial Preference Mr. Pulsford is well worth reading by anyone interested either way in that policy. He also provides some pungent criticism of the Trade-War policy, showing how it would damage the British Empire and ruin several of our smaller Allies.

EDWIN CANNAN

Democracy After the War. By J. A. HOBSON. (London: George Allen and Unwin. Pp. 215.)

IT is a little difficult to deal with this book while paying due regard to an editorial hint that reviews for the JOURNAL should be economic rather than political. The present time, more than any other, is marked by a subordination of the economic to the political: have not the nations made up their minds to fight not only to the last man, but to the last shilling, franc, crown, or mark (and those all paper ones), not for their material welfare, but for something else, which, whatever it be, is certainly a political object? And Mr. Hobson is always political, so political that in this book he must even maintain that a doctrine which we are accustomed to regard as, if anything, ultra-academical, the marginal theory of value, is a "new support for the old capitalist positions" which has been "quite recently"—most of us would say "nearly fifty years ago"—"invented and foisted into intellectual circulation."

But under the pressure of widespread starvation the world is certain to return from politics to economics, and we may speculate —we can scarcely do more—about the changes in economic organisation likely to have been brought about by the war. Mr. Hobson, as might be expected from the consistency of his career, stands by the old lights of State Socialism. He admits that "the State," by which, I think, he means States in general, not the British State alone, will come out of the war considerably dis-

credited by military and economic failures; and he is alive to the importance of the "disposition in some labour quarters to give the go-by to the State," but he regards this disposition as "indefensible." "The vision," he says, "of a working-class organisation building up for itself an economic State, governed by the workers and for the workers, within the political State, but virtually independent of that State for the regulation of economic life, is a dangerous phantasy." And, again: "The notion of two States, one a federation of trades and guilds running the whole body of economic arrangements for the nation by representative committees based upon common interests of industry, the other a political State running the services related to internal and external order, and only concerned to intervene in economic affairs at a few reserved points of contact, will not bear criticism." Perhaps not, but why must we assume that "the nation" must be the unit within which the reformed industrial organisation must be confined? In the last chapter of the book Mr. Hobson declares strongly in favour of internationalism as against the "close State," but his internationalism means relations between national units rather than anything in the nature of obliteration of the dividing lines between these units. This is a striking example of the persistence of nationalism in economics. For if the possibility of war between "nations" is eliminated, there is little reason why labour organisations, as well as capital organisations, should not overlap national boundaries. Within living memory there has been a considerable enlargement of the areas over which labour organisations spread; they already "give the go-by" to most "local authorities," including the authorities of "States" in federations. It seems shortsighted to suppose that labour organisation may not be at some future time as capable of giving the go-by to the Governments of the United States and Canada as it is now to the States of New York and Massachusetts or the municipalities of Manchester and Liverpool. Is feudalism, in the sense of a connection between the individual and definite parcels of land, to endure for ever? At one time it was necessary for the people of a village to carry on their agriculture in common; now it is convenient for the people of a town to have a common waterworks and sometimes a common tramway. There must always be a good deal of economic activity based on local divisions, and the divisions adopted in our age for fighting purposes may often continue to be accepted in a more peaceful one for the management of railways and suchlike, just as the ancient kingdom of Kent survives for the management of main roads at

present. But that these territories, or any territories, must be the basis of the kind of future economic organisation after which Socialists vaguely aspire seems a rash proposition to lay down. In the chapter on "Militarism and Capitalism" Mr. Hobson enlarges on the manner in which capitalist syndicalism had before the war spread itself over the world, so that different States armed themselves for the approaching conflict by buying from practically the same body. May not the labour organisations of the future be equally widespread, and, for better or worse, equally powerful?

EDWIN CANNAN

Ruskin College Reorganisation of Industry. Series III. Some Economic Aspects of International Relations. Commercial Policy and our Food Supply. By H. SANDERSON FURNISS, M.A. *The Influence of the War on Commercial Policy.* By EDWIN CANNAN, M.A., LL.D. *Capitalism and International Relations.* By A. E. ZIMMERN, M.A. (Oxford: Ruskin College, 1917. Pp. 89).

IN the first of these three papers Mr. Furniss' main theme is the question of the food supply of Great Britain considered as a particular case of the "defence *versus* opulence" problem. It is possible that the methods of producing our home-grown food might be improved, and that the volume of production might be increased without our suffering any economic loss, but this is a relatively unimportant matter. As Mr. Furniss points out, the increase required to render the country self-sufficient so far as food is concerned would involve us in a heavy economic loss. Moreover, food is not our only requirement. Anyone who has given a minute's thought to the nature and volume of our essential imports during this war must realise that, under anything like modern conditions, a self-sufficient Great Britain for the purposes of defence is an impossible scheme. If, when this war ends, we have to take the possibility of future wars into account, we shall probably be wiser to rely upon military and naval means to prevent an effective blockade, and to risk their proving a failure, than to ruin the country economically by attempting to achieve the impossible ideal of self-sufficiency. This view, which is advanced with some hesitation by Mr. Furniss, finds strong support in Professor Cannan's paper, in which attention is also drawn to the other great destructive effect of the self-sufficiency scheme. "The cult of national self-sufficiency," says Professor Cannan, "is incompatible with peace, since it must inevitably render warfare perpetual by making it necessary for each nation

to grab territory which contains the source of some product which it has not got in its existing territory, and which it must have in order to be self-sufficient. We have seen a little of this already; it would be more and more serious, the more intense the worship of self-sufficiency."

But, if the nations abandon the ideal of self-sufficiency for the purposes of defence, it is still possible that, on purely economic grounds, they may pursue an economic policy which causes antagonism and war. Mr. Zimmern is of the opinion that the economic policy of the world has caused wars in the past, and with this opinion few will disagree. But what has been the really harmful feature of the course which we have been accustomed to pursue? To this more definite question Mr. Zimmern's answer is vague and unsatisfying. To his mind it seems that the radical evils are capitalism and the search for profit, and a national policy based upon altruism rather than upon self-interest and competitive bargaining is not in his view inherently impracticable. There is, however, no serious attempt in his paper to suggest the means for carrying out such a policy. We are told that the nucleus of the necessary machinery is already in operation in the shape of the executives which have been created for securing and distributing the essential commodities required by the Allies and by neutrals. But does Mr. Zimmern imagine that such bodies conduct their operations without any resort to the methods of competitive bargaining? Again, does he suggest that, because we require special machinery for the administration of relief, and the settlement of disputes arising out of monopoly situations and other abnormal cases, we require similar machinery to deal with the vast volume of the more ordinary transactions which have hitherto been conducted with considerable success by the machinery of the market-place? It is not the system of barter, and the search for profit which are evil, but the misunderstandings and misuses of barter which have far too often destroyed it and replaced it by theft. That we need some control of the market-place and some protection against thieves and fools, both national and international, is now seldom disputed, and we are also acquiring each year a fuller understanding of the truth that in the long run every individual is likely to gain by giving such consideration to the wants of others as is conducive to the maximum satisfaction of the world as a whole. But the concrete problems of competitive bargaining and of the disputes which must occasionally arise from it cannot be avoided, and those who are concerned about the reconstruction of the world after this

catastrophe will do well to fix their attention primarily not upon an—

> "Abstract intellectual plan of life
> Quite irrespective of life's plainest laws,
> But one, a man, who is a man and nothing more,
> May lead within a world which, by your leave,
> Is Rome or London, not Fool's Paradise."

OSWALD T. FALK

Världskrigets Ekonomi. By ELI F. HECKSCHER. (Stockholm: P. A. Norstedt & Söners Forlag. 1915. Cr. 8vo. Pp. 243.)

THE discussion of the economics of the great world struggle in which we are engaged has occupied thinkers throughout the civilised world. Professor Heckscher was early in the field, fortifying himself with information gathered in a journey through a number of the belligerent countries. He gives comparatively little space to the statistical data collected, in part for the very sound reason that many of the most vital particulars for a statistical discussion were not available to him, and will not be made public till the conclusion of the war, and perhaps not then. His inquiries in Germany contribute to the information furnished in the volume little that was not already known, and the statistics actually given are derived almost exclusively from English sources. It may be noted in passing that the interpretation of the trade statistics of the United Kingdom is not entirely satisfactory, as it appears to be assumed that the figures of our exports of such goods as iron and steel, fabrics of wool, etc., to France relate to supplies for the British forces on the Western front.

The book is mainly devoted to a discussion of the great changes in economic organisation consequent on the absorption in military operations of a large part of the male population of many countries. These problems, in their general features, have received constant attention among ourselves, and much of the argument of the Swedish professor is tolerably familiar to the readers of this JOURNAL. The remarkable degree of adaptability of industry to war conditions is a feature which, striking as it is, has become familiar since the time when this book was in preparation. It has manifested itself among both groups of belligerents, and furnishes ground for hope that the reverse process of transformation may be achieved without the catastrophes which appear to some as inevitable.

The problem of preparation for war forms the subject of an

important part of the book, and the author concludes that the only satisfactory way is to establish reserve stores of vital commodities, particularly those which are obtained by importation from abroad. He rejects the alternative of import duties to encourage home production, holding that the desired results can be more economically and effectively obtained by storage. The desirability of accumulating a store of goods in preparation for war is not held to extend to the case of gold, the accumulation of a gold reserve for such a purpose being regarded as an ineffective financial measure.

If we can say that, to English readers, the lines of the Swedish professor's discussion of war economics present little of novelty, it does not by any means follow that the book is lacking in interest and stimulus. Among the more important of the conclusions reached is that it is a mistake to assert that war conditions have rendered invalid the ordinary principles of economic reasoning. So far from this being the case, our author asserts that the events of the war confirm and establish the justice of the accepted principles. The conditions to which they are applied are changed, but the validity of the principles themselves remains unshaken. It is probable that, with the more varied experience afforded as the war progresses, this conclusion, at any rate, will not be abandoned when the author continues his discussion, for it is unlikely that he will be content with a survey limited to the first year of war.

A. W. FLUX

The Development of Rates of Postage. An historical and analytical study by A. D. SMITH, B.Sc.(Econ.), of the Secretary's Office, General Post Office, London; with an Introduction by the Rt. Hon. Herbert Samuel, M.P., Postmaster-General, 1910–14 and 1915–16. (London: George Allen and Unwin. 1917. Pp. 431. 8vo. Price 16*s.* net.)

THIS is one of those useful pieces of work which save a vast amount of labour to future students of its subject. The author writes with inside knowledge, has been afforded official facilities and official encouragement, and meets with something approaching official approval in the commendation of an ex-Postmaster-General, whose judgment will be generally endorsed.

The history is full and documented. It covers the letter, newspaper, and parcel rates in England, Canada, the United States, France, and Germany, the minor rates (for books, postcards, samples, etc.), international rates, and local rates (the specially low charges for letters posted and delivered in the same

postal area). But the part of greatest interest to the economist and the politician is the analytical section and conclusion, of fifty-three pages, the appendix on Post Office Revenue, and the graphs of gross and net revenue, postal rates, and other statistics.

Much is being heard, and more will be heard, of the value of cost accounting in Government business. The Post Office has set an excellent example, and we have here published for the first time a detailed description of the method by which the cost of dealing with the various kinds of postal packets is calculated. The method rests upon various assumptions which need from time to time to be tested and verified anew, and upon estimates which leave in some places room for a considerable margin of error. But the method is on the whole sound, and, in the hands of those who understand its limitations, yields valuable results. Both the methods and results of cost accounting in general are doomed to discredit and discouragement if left to those who have not the statistical training, insight, and special qualifications to bring out the true figures and interpret their real bearing. In this, as in other matters, publicity as to the way in which the figures are arrived at is a great safeguard, and brings its reward in criticism and suggestion.

Cost accounting in the Post Office is an instrument for testing the needs of offices, numbers of staff required, and generally for controlling expenditure. In the volume before us it is applied to the costs of certain branches of the postal service and to the comparison of expenditure upon the letter post, postcards, newspapers, parcels, etc., with the receipts from postage in respect of each branch. This dissection of the postal surplus will be serviceable to future writers upon public finance; but it is hardly fair to the author to give his results away in a review.

Mr. Smith has done his work well. The fact that this is the fiftieth volume in the series of monographs by writers connected with the London School of Economics calls for a word of congratulation to the School upon the stimulus which it has given to economic research in this country and upon the high standard of quality which it has maintained. HENRY HIGGS

Efficiency Methods: an Introduction to Scientific Management. By M. McKILLOP, M.A., and A. D. McKILLOP, B.Sc.(Eng.), C.E. (Routledge and Sons, Ltd. 1917. Pp. viii + 215. Price 4*s*. 6*d*. net.)

THE subject of scientific management was discussed at some length in the JOURNAL for September, 1917, in a review of

Scientific Management, Vol. I. of "Harvard Business Studies," and a re-examination of the matter may be here dispensed with. The beginner will find the present little book an extremely useful introduction to a hotly contested discussion, and for that purpose it may be cordially recommended. The advantages of real efficiency and the good points of the methods suggested are clearly set forth, but no less emphasis is laid on the dangers of a false "science" cloaking ordinary capitalist driving. The need for the management to become efficient itself before it starts out to reform the workshop, and the imperative necessity for associating the workmen with every step in the reform process, are kept in the foreground. The reader's special attention should be given to the chapter on trade unions.

HENRY W. MACROSTY

Outlines of Political Economy. By S. J. CHAPMAN, M.A. (London: Longmans. Third Edition. 1917. Pp. xvi + 463.)

THE present volume is the third revised and enlarged edition of Professor Chapman's *Outlines.*[1] The general scheme of the work is unchanged, but there are two additional chapters on the Development of Political Economy, and a number of alterations in detail are to be observed. For example, the treatment of quasi-rent, which in the earlier editions was distinctly unorthodox, is here brought into line with the doctrine as expounded by Marshall. The experience of the war is adduced with considerable effect in several places, but those hasty writers, who believe that the war has shown up the economists and knocked the bottom out of their most cherished theories, would derive scant encouragement from a comparison of the present edition of Professor Chapman's book with that which was published in 1911. In these pages, at least, the basic conceptions and theories of political economy remain firm and unshaken, and those stalwart protagonists, the laws of supply and demand, still hold the field against all comers.

Professor Chapman appears to have written these "Outlines" principally for the university student, and his book is to be commended to any (other than absolute beginners) who wish to gain a clear idea of the general content of theoretical political economy. The method which he has adopted has been to survey a large part of the field covered by economics and to bring out in each

[1] The first edition was reviewed in the ECONOMIC JOURNAL of March, 1912.

case briefly and concisely the chief theoretical points of interest involved. His mainstay throughout is the marginal concept, the great value of which is undeniable; nevertheless, if used quite as insistently as it is here, it is apt to give an air of somewhat academic unreality to what is one of the most vital and human of all subjects. This book has grown out of lectures to students at Manchester University, but the present reviewer, who imbibed his first notions about economics while sitting at Professor Chapman's feet, is conscious of a feeling of disappointment at finding the written sentence turn out—or so it appears to him—cold and uninspiring as compared with the well-remembered magic of the spoken word. Perhaps, also, the rather didactic presentation of the subject proper to a course of elementary lectures is apt to become rather a source of irritation when met with in print. The writing of an elementary text-book on any subject is a difficult and a thankless task, but a special danger besets the path of the writer on economics, who has to steer clear both of the Scylla of journalese and the Charybdis of mere academicism. The criterion of success is the extent to which an intelligent but uninitiated layman is enabled to *realise* the subject, is given a clear grasp of principle, and is imbued with a keen desire to follow up what he has learnt. It is difficult to imagine either a business man or a manual worker turning with pleasure to this book in his leisure hours in the hope of picking up general notions of the teachings of economics. The book seems unnecessarily academic in treatment and outlook; it would surely have gained very greatly in interest and value if its scope had been somewhat restricted and a considerable amount of space devoted instead to illustrations drawn *not* from the imagination, but from the actual facts of business experience.

Professor Chapman is well known for his writings on industrial and labour questions and for his great knowledge of practical affairs, which has gained for him the respect of many of the hard-headed manufacturers and business men of Lancashire. Will he not now earn the gratitude of a very wide public by combining in his next book his knowledge of men, of the manifold springs of their actions, and of the actual mechanism and functioning of modern industry and commerce with his gift for clear exposition and his mastery of economic theory?

C. W. GUILLEBAUD

NOTES AND MEMORANDA

REPORTS ON NATIONAL EXPENDITURE.

Finance Accounts of the United Kingdom for the year 1916-17 (H. of C. Paper 102 of 1917, 85 pp., 6*d*.); *First Report from the Select Committee on National Expenditure* (151 of 1917, 10 pp., 2*d*.); *Second Report* (167 of 1917, 22 pp., 3*d*.); and *Third Report* (188 of 1917, 4 pp., 1*d*.)

THE Finance Accounts appeared unusually late this year and only in time for this number of the JOURNAL. A wholly laudable, but somewhat pathetic, striving for economy has led to the disappearance of some dozen blank or nearly blank pages and of the familiar blue cover. Otherwise, to a superficial view, the war has made little difference: the sum paid for the salaries of the Six Trumpeters in Edinburgh has fallen from £98 8*s*. 5*d*. before the war to £77 5*s*. 10*d*. because "the salary of one Trumpeter has been suspended for the period of his absence on military service," but "The Poor Scholars of Oxford," though the proportion of them absent is more like 5 in 6 than 1 in 6, receive as usual the £3 1*s*. 6*d*. which they have had ever since the riot on St. Sepulchre's Day in the reign of John. Some day, perhaps, after the war the Treasury may find time to eliminate unnecessary detail, and insert instead more particulars about some of the larger items.

Comparing the figures with those of the last year of peace, 1913–14, we find that the total expenses of civil government, including education, old-age pensions, health and unemployment insurance, labour exchanges, grants in aid of local taxation, and the Post Office have remained almost stationary at about £97m., natural increases and increases due to the war being about balanced by war economies and savings due to absences on military service. Interest on debt, including that on the "Other Capital Liabilities," was about £20m. in 1913–14 and had risen to about £128m. in 1916–17, but this is the amount actually paid

while the aggregate liabilities were largely increasing. The interest payable on what was due at the end of the year must be in the neighbourhood of £190m. And finally, naval and military expenses were, excluding repayment of debt in military and naval votes, about £75m. in 1913–14 and £1,971m. in 1916–17. The corresponding figure for 1915–16 was £1,398m. and for the eight war months of 1914–15 it may be put at £410m., making a total to March 31st of £3,779m., or, if we deduct £213m. for naval and military expenses on the scale prevailing just before the war, £3,566m. for the special cost of the war. The Committee on National Expenditure make it £5,000m. up to September 30th, 1917.

If we assume that the war had to begin and cannot be stopped, we may still find it interesting to inquire whether it ought to have cost so much, and possibly advantageous as well as interesting to inquire whether its cost should continue on its upward course. For this purpose the Committee on National Expenditure have been appointed, and, so far as can be seen at present, they are doing very good work and likely to be of great service. They have made a large number of useful suggestions on points of detail which, in the aggregate, may mean the saving of hundreds of millions, and they have also managed to bring out some principles neglect of which has cost our own State and the community of nations even larger sums. One of these appears in §9 of the First Report. It is what, when once stated, seems a very obvious truth—that in the choice between different military policies their comparative cost is one of the matters which should be taken into consideration, or, in other words, if there are two ways of gaining the same end, the cheaper ought to be preferred. The Committee found that "the Imperial General Staff, who are the advisers of H.M. Government on all matters of military operations, are not instructed to consider, and do not regard it as part of their functions to consider, the money cost of any policy which they may propose."

In the Second Report they touch, though with a much less certain hand, an even more important cause of expense, the belief that the war ought to be and can be carried on without any economic loss except that of the luxuries of the wealthy. They are sure that neither the percentage of profits nor the commodities and services which can be purchased with wages should be increased in consequence of the war, but they shrink from bold assertion of the truth that the mass of the population must not expect to be as well off in war as in peace. The furthest they

will go is to be found in §33: "The strongest case should be required to be established before any advance of wages is conceded on any ground other than the rise in the cost of living. Nor should it be regarded as a rule—and we have no reason to think that Labour in general desires that it should—that wage-earners in receipt of not inadequate pay before the war should be exempted from all share in the economic sacrifices involved by a state of war." They recognise in §32 that increases of wages to meet the increased cost of living result in still further increase in cost of living and vastly increase the cost of the war, but they fail to draw the inference that wages ought not to be increased to meet the cost of living, that if they were not, the cost of living would not rise so much, and the cost of the war would be less, while at the same time the actual necessaries and comforts enjoyed by the mass of the population would have been greater than it is because the required reduction of consumption would have been effected quietly and economically in normal ways instead of by the noisy and wasteful methods of Sir Arthur Yapp, Lord Rhondda, and all the other Controllers with their gigantic staffs of flappers and incapable men. Far from attempting in a futile manner to keep the mass of the population in the same comfort as before by raising their money-wages, a State which wished to carry on a war of the present magnitude ought to have endeavoured at once to reduce their net money means by heavy taxation. It is true that something in that way was done, but how little! The yield of Customs and Excise together only rose from £75m. in 1913–14 to £127m. in 1916–17. Though *per capita* money income has increased enormously in the hundred years, and especially in the last three years, the higher figure means little more per head than was paid towards the end of the Napoleonic war. Having given too much and taken too little directly, the State might still indirectly have got back some considerable amount of what it had squandered, by allowing the people to pay high prices and taking the profits resulting from them. But no! Instead of that it sells cheap when it has got the whole supply of an article in its own hands, and cuts off the yield of the excess profits tax by enforcing maximum prices upon other sellers. And the results are the queue, equal rations, and the most dangerous discontent among a people which has plenty of money but cannot buy anything except drapery.

Some complain of a "vicious circle" and say they cannot see where to break it. Expenditure rises because prices rise, and prices rise because expenditure rises. But the simile of the kitten

chasing its tail is far more appropriate. If the kitten will go slower the tail will go slower. The seat of volition is in the Government. The Chairman of the Committee complained in the House of Commons on January 30th that in the half-year since it was appointed, while its recommendations for economy in detail had been largely adopted, increases of expenditure adding nothing whatever to the goods and services obtained by the Government had been sanctioned to the extent of £196m. per annum—just about the whole expenditure of the State before the war.

	£
The subsidy given to reduce the price of bread	45,000,000
Subsidy given to growers of potatoes	5,000,000
Further bonus given to bakers to encourage them to use potatoes in the baking of bread	150,000
Increase in the payment of soldiers and sailors	65,000,000
Additional sums paid in increased pay to officers of the Army and Navy	7,350,000
Bonus or wage advance to miners	20,000,000
Bonus or wage advance to munition workers, direct and indirect...	40,000,000
Ditto, railway workers	10,000,000
Ditto, Civil servants	3,000,000
Ditto, teachers in Ireland	170,000
Ditto, Irish police	100,000
Additional grant to the National Insurance Fund	400,000
Total increase	£196,170,000

Faced by such profligacy, we call to mind the truest of all proverbs: "Light come, light go." Government can spend sums nine times as large as its pre-war expenditure and more than equal to the pre-war total income of all its subjects because it is able to get the money by other means than taxation. If confined to taxation, it would be prevented from raising so much by the unpopularity of additional imposts: spending less, it would still be able to get just as much as at present owing to the lower level of wages and prices within the country, and the people would be somewhat better off.

The contribution made by taxation to the cost of the war shown by the accounts before us is considerable in proportion to the pre-war taxation, but trifling in comparison with the total expenditure. Customs and Excise, as already mentioned, rose from £75m. before the war to £127m. in 1916–17, income tax and super tax from £47m. to £205m., and the excess profits tax yielded £140m., a total increase of £350m., the other branches of taxation remaining nearly the same. Increase of taxation thus provided only about one-sixth of the increase of expenditure. Though the yield will be larger during the present year, there is little prospect of the proportion rising much above one-sixth.

The rest of the increase of expenditure was provided for by increase of debt as shown in the following table: —

"NATIONAL" or "DEADWEIGHT DEBT" 1914–17
(million £ at March 31)

	1914.	1915.	1916.	1917.
Funded debt, including terminable annuities	616	611	345	342
3½ per cent. War Stock and Bonds 1925–8	—	349	63	63
4½ " " " 1925–45	—	—	900	20
5 " " " 1929–47	—	—	—	2,067
4 per cent. tax compounded 1929–42	—	—	—	52
5 per cent. American loan, 1920	—	—	51	51
War expenditure certificates (2 years) ...	—	—	—	24
War Savings certificates (5 years) ...	–	—	1	74
Exchequer bonds 2¾ and 3 per cent. 1915	20	17	—	—
" " 3 per cent. 1920 ...	—	50	22	22
" " 5 per cent. 1919, '20, '21	—	—	155	157
" " 6 per cent. 1920 ...	—	—	—	142
Treasury Bills	13	77	567	464
Temporary Advances	—	—	20	218
Other debt	—	—	9	317
Total...	650	1,105	2,133	4,011
Increase in the year		455	1,028	1,878

Unlike the increase of debt during the previous "Great War," which greatly exceeded the amount of money borrowed, the increase shown here does not differ much from the sums actually received, as the diminution in the capital of the debt involved in the conversion of Consols into War Loan has to be set against the discounts and expenses of the new issues. The total includes the amount obtained by the issue of currency notes in excess of issue as exceeded the £28½m. of gold held against them, as this excess is "invested" in taking up one or other of the securities named in it.

The amount, at first sight, seems astonishing and incredible if we place any reliance on pre-war estimates of national income as something probably under £2,400m. and national savings as something probably under £400m. Individuals certainly are not saving all their incomes beyond what is exacted in taxation and lending them to Government! But astonishment and incredulity diminish when we reflect that money comes out from the Exchequer as fast as it goes in, and even, owing to the weekly issue of about a million of fresh currency notes, a little faster. The profusion of Government allows its subjects to lend it more money—the growing profusion of Government allows its subjects to lend it larger and larger amounts. If the Government, recognising the national importance of the production of sound economic opinion, will provide a subsidy of £50 for each article in the ECONOMIC JOURNAL, the present writer, at any rate, will be

ready to invest £50 in War Bonds—nay, he will, to save trouble, accept payment in War Bonds. Writers on public finance have fumbled over the "limits to public expenditure," the prices of commodities and services being taken as fixed, or the effects of change being eliminated by discussing percentages of income. The power of Governments to obtain human energy for the purpose of fighting the enemy is certainly limited, but the limitation is based, not on the impossibility of getting more money, but on the limitation of the quantity of energy available. Provided the money is paid out, it can be raked in again. It could be raked in again (the excess profits duty furnishes an easy example) by taxation as well as by borrowing except for the fact that the human mind appreciates the futility of the business better when £100 collected by the State means immediately £100 paid by the subjects in taxes than when £100 received means £100 immediately paid away for the prospect of receiving £5 (less income tax) per annum, while at the same time paying in the future enough additional taxes to pay that income *plus* expenses of management of debt and the cost, direct and indirect, of collecting the new taxes.

The possibility of paying out and raking in indefinitely large sums seems to be bound up with the co-existence of a currency which can be indefinitely enlarged. A finite currency, such as that provided by a particular metal, will be found insufficient, its insufficiency will cause a want of confidence, and the want of confidence will prevent money being lent sufficiently rapidly to maintain the profuse expenditure. Hence the perpetually increasing issues of paper money even by the more solvent Governments, to whom the amounts secured by the issues themselves are comparatively unimportant. The Committee look with some suspicion on the issue of currency notes, but blunder badly in adopting the view that it would raise prices more to pay the additions to the issue out directly to contractors and other persons employed by the Government in exchange for services performed by them than to pay them to banks which give in exchange other currency which can be so paid out. What possible difference can it make whether a munitioner gets a pound-note hot from the press or cold?

EDWIN CANNAN

ON ABSOLUTE PRICE, AND INDEX NUMBERS OF PRICE.

I.

It is a truism that there cannot be a simultaneous rise in all values: and it is equally obvious, after a moment's thinking, that there cannot even be rises in the value of some commodities which prevail in magnitude over the falls in others, for that would mean a rise in the average value. If such a state of things appears to exist, it implies that values have not been accurately measured; and this again is referable to the want of a proper standard of value.

To arrive at a proper standard we proceed as follows:—

Let the person a possess a quantity a_1 of a certain commodity.
,, ,, a ,, ,, a_2 ,, another ,,
,, ,, b ,, ,, b_1 ,, the first ,,

and so on. And let the prices of these commodities, in terms of any standard, be p_1, p_2, etc.

So that the wealth of the person a is

$$W_a = p_1 a_1 + p_2 a_2 + \ldots = \Sigma pa$$

Then the total amount of the first commodity is

$$Q_1 = a_1 + b_1 + \ldots.$$

and the total wealth of the community is

$$W = p_1 Q_1 + p_2 Q_2 + \ldots. = \Sigma pQ$$

Now suppose that while the goods in existence remain the same as before, the subjective valuation of them by the people changes, for any reason; so that the price of the first commodity, in terms of the same standard as before, becomes $p_1 + \delta p_1$ and so on.

Then the increase in the total wealth of the community is

$$\delta W = Q_1 \delta p_1 + Q_2 \delta p_2 + \ldots. = \Sigma Q \delta p.$$

Now in general this increase, being expressed in terms of an arbitrary standard (say for brevity, gold) will not be zero. But it seems to accord with the essential meaning of the term "value" that such a subjective revaluation as we have supposed should not imply a change in total wealth, but that any gain in value of some commodities is necessarily at the expense of a loss by others, such that the total is unchanged. Adopting this view, we require a new standard to which gold prices must be reduced, and we shall give to this the designation "absolute," and obtain Definition (1)

"*Absolute price is price expressed in terms of a standard such that a revaluation of commodities, unaccompanied by any change in their amount, causes no change in the total of wealth.*"

Then let g be the price of gold in terms of the absolute standard, and the absolute price of any commodity be

$$\pi = gp$$

Then

$$\delta\Sigma\pi Q = 0 = \delta\Sigma gpQ$$

or

$$g\Sigma Q\delta p + \Sigma pQ\,.\,\delta g = 0$$

whence

$$\frac{\delta g}{g} = -\frac{\Sigma Q\delta p}{\Sigma Qp} = -\frac{\Sigma Q\delta p}{W} \quad . \quad . \quad . \quad . \quad . \quad . \quad (1)$$

This equation enables us to express the fluctuations in the absolute price of gold, and consequently to realise the absolute standard of value (except for a constant factor, which is arbitrary and of no importance).

This definition, however, is not the only possible one, and it may be objected that when a subjective revaluation occurs, the efforts of the community will no longer be directed in the same way as before; but that insofar as the continued production of new goods is in question, the condition of unchanged production is really inconsistent with the premiss of changed values. We ought rather to suppose that production is modified to suit the new values, but that the total of productive effort remains the same as before. We then obtain Definition (2):

"*Absolute price is price expressed in terms of a standard such that a revaluation of commodities, accompanied by the consequent redistribution of effort in production, the total of effort being unchanged, causes no change in the total of wealth.*"

Let g' be the price of gold in terms of this new standard, and

$$\pi' = g'p$$

be the price of any commodity.

Let e_1 be the elasticity of supply of the first commodity expressed in gold prices, or

$$e_1 = \frac{p_1 dQ_1}{Q_1 dp_1}.$$

Then the wealth of this kind produced under the new conditions will be $(p_1 + \delta p_1)\,(Q_1 + \delta Q_1)$ and will exceed the total under old conditions by

$$p_1\delta Q_1 + Q_1\delta p_1 = (1 + e_1)\,Q_1\delta p_1$$

Similarly let ϵ_1 be the elasticity of supply expressed in absolute prices, so that the increase in the wealth of the first kind is

$$(1 + \epsilon_1) Q_1 \delta\pi_1$$

and the increase in total wealth

$$\delta W = \Sigma(1 + \epsilon) Q\delta\pi = 0$$

by definition.

[For the changes in the Q's are not arbitrary, but are connected by the condition that their sum must be such as to save as much effort in some directions as is spent in others.]

But

$$\epsilon = \frac{\pi'\delta Q}{Q\delta\pi'} = \frac{g'p\delta Q}{Q(g'\delta p + p\delta g')}$$

so that

$$\frac{e}{\epsilon} = \frac{g'\delta p + p\delta g'}{g'\delta p}$$

Hence

$$\delta W = \Sigma\left(1 + e\frac{g'\delta p}{g'\delta p + p\delta g'}\right)Q(p\delta g' + g'\delta p)$$

$$= \Sigma Q(g'\delta p + p\delta g' + eg'\delta p)$$

$$= \Sigma Q\{p\delta g' + (1 + e)g'\delta p\} = 0$$

Or

$$\frac{\delta g'}{g'} = -\frac{\Sigma Q(1 + e)\delta p}{\Sigma Qp} = -\frac{\Sigma Q(1 + e)\delta p}{W} \quad . \quad . \quad . \quad (2)$$

The first of these definitions may be distinguished as the "capital," the second as the "income" definition of absolute price.

Subjective revaluations in nature are not abrupt, though they may be rapid (*e.g.*, on outbreak of war); we must therefore suppose, in order to realise the first definition, that the revaluation happens in a time too short for an appreciable change in the existing stock of goods. In order to realise the second definition, it must be supposed to happen in a time too short to admit of an appreciable change in the amount of natural resources, capital, labour and enterpriser's ability in existence. The term "effort" in the definition is to be taken as including the use of the material factors available for the human effort.

If the money used by the community be not a mere means of exchange, but has value in itself, it must be counted as one of the commodities: for it, of course, $\delta p = 0$.

II.

Index numbers are based on the theory that changes in the value of gold are measured inversely by changes in the weighted

mean of gold prices. This would appear to be in accordance with equation (1); but the commodities chosen for calculating index numbers are always such as form an important part of income rather than of capital. Hence the customary index numbers while they give a workable approximation in the case of changes due to abundance or scarcity of money, do not apply correctly to such cases of revaluation as are considered above. On the other hand, the basis of index numbers is not consistent with equation (2). (Though the inconsistency, being only in the weighting, may not be important in practice.)

Any arbitrary set of changes in prices and quantities may be expressed as the sum of a change in demand (or subjective revaluation) and a change in supply (or in effort), in the foregoing. At first sight it might be thought that on allowing for the latter, the absolute price of gold might be determined by means of the change in demand.

But the equation of exchange is:—

$$\Sigma npQ = MV \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad (3)$$

where n is the number of times any piece of wealth is sold, M is the amount of money, and V the frequency with which it is used. Now, if the quantity and frequency of money remain the same, it is clear that a knowledge of the conditions of supply and demand alone will not enable us to calculate δp since n is unknown. Of course, if the δps are known historically equation (1) can be applied to find the absolute price of gold; but if only the nature of the change in demand is known, equation (1) can only be applied in such a way as to satisfy equation (3). That is, an index number, even if it took into account all commodities, and was weighted in accordance with their quantity, would only give correctly changes in the value of gold due to monetary changes, but not those due to changes in supply and demand of commodities (*i.e.*, if value be identified with absolute price as defined in this paper).

III.

At the beginning of the war an abrupt change in demand caused the value of most consumption goods to rise relatively to most instrumental goods (including with the latter durable consumption goods like houses). Now, the quantity of consumption goods in existence is much smaller than that of instrumental, but the value of n for the former much exceeds that for the latter. Consequently, although $\Sigma nQ\delta p$ was positive, that of $\Sigma Q\delta p$ was negative, hence by (1) δg was positive, *i.e.*, the absolute price of

gold rose. (Money is, of course, much in request in time of crisis.) Subsequently, monetary inflation tended to neutralise the rise in value of money, while exaggerating the rise in the gold price of consumable goods.

At a later stage the assumption of a constant stock of goods involved in equation (1) is to be replaced by the assumption underlying equation (2) of constant effort turned into new directions. Later still no doubt the total of effort was increased.

The extremely high gold price of consumption goods in the later years of the war cannot be explained in accordance with equation (3) entirely by an increase in M and a decrease in Q No doubt there is inflation of currency, not neutralised, in England at least, by hoarding; also the total output of goods is probably less than in peace time, despite greater effort. But it is worth while enquiring whether a decrease in n is not of importance too. This comes about in two ways; a great part of the effort goes to produce a commodity—military service—that is only sold once. Secondly, the difficulties placed in the way of trade, and especially of speculation, would diminish n and so tend to raise gold prices; a consequence almost ludicrously in conflict with the intentions of governments in discouraging speculation.

The phenomena observed in a commercial crisis are in many ways similar to those of the first phase of the war; commercial cycles generally afford good illustrations of the theory.

If the taxable income of the United Kingdom for the last half century[1] be graphed, it will be found to show marked inequalities of progress. If the figures be reduced by means of Sauerbeck's index number the series shows almost equal irregularities in the opposite sense. The curve is made much smoother by the use of a new index number = Sauerbeck's index + 85. This of course is far from showing that the new index is correct; but it may serve to show that for some purposes the usual indices like Sauerbeck's are incorrect.

R. A. LEHFELDT

Johannesburg,
June, 1917.

EXTRACTS FROM GERMAN PERIODICALS RELATING TO THE WAR.

THE *Annalen des Deutschen Reiches*, 1917, Nos. 1–4, gives a good analysis of the Auxiliary Service Act. The principal objects of the Act are to place supplies of labour at the disposal of the munitions industries and to set free for the Army men hitherto

[1] *Stamp*, J. C.: *British Incomes and Property*, p. 318.

indispensable at home. Every male German between the ages of 17 and 60 is liable to auxiliary service, provided he has not been called up for army service. Every German is subject to auxiliary service without distinction of rank, position, or calling, irrespective of the class of the population to which he belongs, whether he is an employer or an employee, whether he is a manufacturer, a trader, an artisan, a business man, or a farmer, whether he is a member of the learned professions or a labourer, whether he is rich or poor, whether he is dependent on his own labour for his subsistence or not.

Men liable to military service are also liable to auxiliary service. During the period when they are in the Army, however, the latter obligation is dormant. But if a man is discharged, it comes into force again automatically. This is particularly important in the case of men who are temporarily exempted, and who, during the period between their discharge and their return to the Army are subject to auxiliary service.

The auxiliary service obligation falls only upon men. It does not apply to females or to lads under 17. There was, indeed, a movement among German women to bring about their inclusion in the Act. But no urgent necessity for this was recognised. There is no lack of female workers. The labour market in general always shows a large surplus of women workers. It was therefore not necessary to make women also liable to patriotic auxiliary service. This does not mean that there was any desire to dispense with the services of the women. The voluntary offer of those services is expected.

The competent authorities have the right, within the scope of the Act to dispose of the activities of every private individual. Any man liable to auxiliary service can at any time be called up for it, and indeed, as is the case with military service, even when living abroad. The Auxiliary Service Act divides the entire economic life into two parts—that which is concerned with the war and that which is not. The former is called "patriotic auxiliary service." In this the more important class is placed work in connection with official bodies, in war industries, in agriculture and forestry, in sick-nursing, in war economy organisations of every kind, or in other occupations or businesses which are of direct or indirect importance for the conduct of the war or supplying the people's needs.

In carrying out the required rearrangements the voluntary principle is to be employed as far as possible. (But by a new order of Nov. 9 a larger measure of compulsion is introduced). There

are elaborate provisions for the legal protection of those liable to auxiliary service.

The whole of the administration is in military hands. Decisions are entrusted to committees which are variously constituted according to the nature of their duties. They are of three types: (1) Committees which have to decide:—(a) Whether an occupation or business within the meaning of the Act is of importance, directly or indirectly, for the conduct of the war or supplying the people's needs; (b) Whether and to what extent the number of persons employed in a calling, an organisation, or a business exceeds its requirements. (2) Committees which have to decide as to the calling up of individuals liable to auxiliary service. (3) Committees which have to decide appeals against refusal to grant a leaving certificate (the certificate which a man liable to auxiliary service must bring from his previous employer before he is engaged by another).

Thus, without shaking the foundations of economic life, it will be possible to divert large numbers of men from unessential occupations to war industries.

The December number of *Technik und Wirtschaft* (No. 35, 1917) cites results obtained from the employment of women in war industries, especially in foundries.

The output of the women is only in exceptional cases equal to that of the men; as a general rule they average ⅔ or ¾ of a man's production. The use of special clothing for women, such as vests, trousers, and caps, had a very favourable influence on the increase in production. By wearing male attire, women are able to undertake work of a kind which they had hitherto been prevented from doing, and as a result of this the number of male staff can be reduced. Another consequence of this special attire for women is that they are better able to resist changes of temperature (as is the case in foundries), and are thus less liable to catch colds. Vests, trousers, and caps also give better protection against dust, and are a safeguard against accidents.

As to wages, it is rather difficult to adopt the principle used in machinery shops, namely, paying women for piece-work ⅔ of a man's salary. Work changes constantly in foundries, and a casting which is made to-day by a man may be made to-morrow by a woman. To avoid difficulties, which most likely would arise if one and the same kind of work was paid on a different scale, it has been thought better to pay women at the same rate as men. One danger will always remain—that women will endeavour to get employment in the machine shops, a kind of work which they

undoubtedly prefer, when the high wages offered them in foundries have no more charm for them.

According to the statistics of the General Local Sick Pay Office, Berlin, in Dec., 1916, only 16.7 per cent. of the women (of the men 62.6 per cent.) earned more than Mk.3.15 a day, 25.3 per cent. (men 14.3 per cent.) had an income of from Mk.2.16 to Mk.3.15, and 58 per cent. (men 23.1 per cent.) did not receive a daily wage of Mk.2.16. A similar state of things is revealed by figures lately issued by the Leipzig Local Sick Pay Office.

Statistics quoted from *Deutsche Metallarbeiter*, Nov. 27, show the following contrast between the daily wage (in marks) of men and women.

	Men.	Women.
Unskilled	5·0	3·50
Stampers	4·50	3·0
Warehouse hands	7·50	4·0
Crane drivers	8·50	5·50

It appears that Krupp's pay their unmarried men for uninterrupted work after three months a special bonus of Mk.25, whereas women only receive Mk.20. (*Soziale Praxis*, Nov.27.)

According to the *Soziale Praxis* (Jan.10), the number of women employed on the Prussian railway system, amounting before the war to 10,000, is now 100,000. On the whole their employment has been so successful that the Minister of Railways intends to increase considerably the number of women employees for the duration of the war. In many departments women have proved themselves fully the equals of men, but when physical strength is required, as, for example, in keeping the lines in repair, and in the workshops, women can only do 50 to 75 per cent. of the work performed by the men.

In *Die Konjunctur* (Oct.17) the well-known editor of that organ, Richard Calwer, deprecates the order which was about to be issued by the German Bundesrat to the effect that a special licence will be required: 1. For the formation of joint stock companies of all descriptions if their share capital amounts to more than Mk.300,000. 2. For an increase of the capital of such companies if such increase exceeds the sum of Mk.300,000, with other provisions intended presumably to withhold access to the money-market from those not devoted to war industries. What is really intended, observes Dr. Calwer, is that a central office (Emissionszentrale) conducted by the Reichsbank is to be empowered to decide whether or no a company is to be permitted to increase its capital. But even the best-conducted and best-equipped

office cannot rightly appreciate the necessity for new issues as affecting private interests, and still less as affecting national interests. It has to proceed in accordance with a fixed and rigid scheme. It will be just in the period of transition economy that this policy will give rise to the greatest blunders and injuries since it is then that the greatest freedom of action possible will be needed in order to stimulate and increase the spirit of industrial enterprise. Furthermore, the limitation of unrestricted issues at that juncture cannot be wholly effective. The Central Issues Office can indeed prevent capital increases in the latter, but the companies concerned will then endeavour to find a way to procure themselves the necessary capital by some other method, and thence will result an extremely unhealthy development, the disadvantages of which will far exceed those arising from unrestricted issues. No check, for example, will be placed on large private concerns which increase their capital, but only on joint-stock companies. From this differential treatment consequences will follow which will be the more objectionable the more the liberty of action of share companies is restricted, yet it is proposed thus to fetter the share companies not only during the war, but also in the period of transition economy. Here again we see the triumph of the idea which lies at the root of the system of compulsory war economy that economic activities can be and must be regulated from a bureaucratic standpoint. In spite of the experiences of war economy the fact still fails to gain recognition that for such a regulation to be effective the necessary power to enforce it is lacking, and that economic life is in revolt against any such regulation and is finding ways and means to escape from it.

In the Dusseldorf Chamber of Commerce, Dr. Otto Brandt argued against the intention of Government to create monopolies in order to meet the burden of war. This intention was announced by Dr. Michaelis, then Chancellor, and Herr Schiffer, Under-Secretary of State for the Imperial Treasury. Compulsory Syndicates, who for the protection of Government would pay a tax are recommended by Geheimer Kommerzienrat Caro. Brandt argued as follows :—

Caro is prepared to permit the Government to have monopolies instead of compulsory syndicates, for its syndicates somewhat resemble monopolies, and this demand is advanced still more strongly in other quarters. Shortly after the outbreak of the war Prof. Jaffé loudly voiced the demand for the "militarisation of economic life," and challenged the Government to get rid of

employers' profits by taking over industries and monopolising them.

The Government is obviously ready to take this hint, since it believes it has at its disposal soil well prepared for such efforts by the effects of the war and the compulsory economic system which it involves, and is counting upon the fact that industry, which no longer presents a united front against compulsory syndicates and monopolies, is a force too weak to be able to undertake a vigorous defence of private enterprise. For this reason Herren Michaelis and Schiffer have announced that the Government, on financial grounds, is about to create monopolies for meeting the burdens of the war, and has at the same time declared aluminium and nitrates to be monopolised industries. What other raw materials or industries are to be subjected to similar treatment we do not know, but so much we can say, that the raw material industries and the grain trade are the first that it is proposed to nationalise.

It is indeed hardly necessary to describe in detail the dangers lurking in these plans for Germany's economic life both at home and abroad. In no circumstances is it possible to agree with the Imperial Chancellor's idea that monopolies must be introduced for financial reasons, in spite of the fact that they will, as he freely admits, be more expensive in their working and, as he somewhat mildly puts it, will injure the quality of the goods. The danger that Germany may not produce her goods and especially raw material (which is to be the chief subject for monopolisation) as well and as cheaply as possible, but dearer and worse than industry must demand and than other nations are able to do, is indeed very great, since everyone knows that even before the war our industries could only make their way on the world's markets by their ceaseless endeavours to keep down the prime cost. Whoever, like the Imperial Chancellor, is firmly convinced that monopolies have the consequences mentioned must, in my opinion, give preference to any other means of raising money. In criticising Government monopolies it is not merely a question as to whether they are cheap and good, or bad and dear, in their working, but what must turn the scale is the devastating effect they have on economic life by eliminating all private enterprise. A syndicate also restricts the individual undertaking to a certain extent, viz., in regard to increasing the amount of its output. But in a syndicate many concerns compete with each other, and each manager of a concern endeavours to increase the technical advantage and the profit of his own concern above those of others in the syndicate by more

economical methods of working and by introducing as many technical improvements as possible. Thus it is exactly that mutual incentive to the economical working of a concern which is most valuable for industrial progress that is retained by the syndicate. All competent minds in the industries concerned are constantly at work, all commercial and technical intelligences are continually busy and spurring each other onward. In the case of a monopoly this competition with its many-sidedness is completely lacking.

OFFICIAL PAPERS.

Seventy-ninth Annual Report of the Registrar-General of Births, Deaths and Marriages in England and Wales (1916). [Cd. 8869.] 5*s.* 6*d.*

THE marriage-rate for 1916 was 14·5 per 1,000; 4·5 below the abnormally high rate of the preceding year, and ·5 below the average of the decade 1905–14. The birth-rate was 20·9 per 1,000, the lowest rate on record. The proportion of male to female births was unusually high. The civilian death-rate may be considered as approximately equal to the lowest on record—viz. for 1912—when a correction is made for the *deterioration* of the male population between the ages of 15 and 45 resulting from the abstraction of men fit for military service.

Reorganisation of the Board of Trade [Cd. 8912.] 1918. 1*d.*

THE work of the Board of Trade is to be organised in two main Divisions or Departments, viz:—(*a*) *The Department of Commerce and Industry*, and (*b*) *The Department of Public Services Administration.* The Department of Commerce and Industry will be mainly concerned with the development of trade, with vigilance, suggestion, information, and with the duty of thinking out and assisting national commercial and industrial policy. The Department of Public Services Administration will be primarily engaged in the exercise of statutory and other administrative functions of a permanent nature with regard to trade and transport now or in the future entrusted to the Board of Trade. It will therefore include the work performed by the present Marine, Railway, Harbour, Companies and Bankruptcy Departments. The Department of Commerce is subdivided into several sections:—(*a*) *Commercial Relations and Treaties* (the present Commercial Department), including such matters as commercial treaties and agreements, Empire and foreign tariffs and trade regulations, etc., (*b*) *Overseas Trade (Development and Intelligence)*; the newly-constituted Joint Department of the Board of Trade and Foreign

Office (as to which see Cd. 8715); (*c*) *Industries and Manufactures.*—A new department dealing with home industries, with special reference to their development and stability, production, and the economic strength of the country generally; with questions of policy connected with trade monopolies and combinations, alien penetration into British industries, and the promotion of new trades. (*d*) *Industrial Property.*—The main part of this department will be constituted by the existing Patent Office. Among its functions will be the encouragement of invention and the protection of the commercial public from the abuse of monopoly. (*e*) *Industrial Power and Transport.*—A new department charged with the consideration of all questions of general policy relating to transport in its commercial aspect, including shipping, canal and railway rates and facilities, through railway and ocean rates, shipping conferences, etc. The Department of Public Services Administration consists of sections which are already in existence. The purposes of the reorganisation will be furthered by the issue of the *Board of Trade Journal* in a new and extended form.

Weekly Hours of Employment Memorandum. No. 20. *Health of Munition Workers Committee* (Ministry of Munitions [Cd. 8801.] 1*d*.)

THE Committee, referring to their Memorandum No. 5 (noticed in the ECONOMIC JOURNAL), consider that the maximum limits of weekly employment there provisionally suggested (*e.g.* for women and girls as the normal legal limit, 60 hours) was too high. In proof of this results of Dr. Vernon's investigations are cited, for instance:—

WOMEN TURNING ALUMINIUM FUZE BODIES.

	Actual weekly hours.	Relative hourly output.	Relative total output.
First period	66·2	100	100
Second period	54·8	134	111
Third period	45·6	158	109

A further reduction of hours—with due regard to the circumstances of different works—is recommended.

Review of the Trade of India, 1916–17. Forty-third Issue No. 453.

ELEGANTLY coloured diagrams exhibit the changes in the proportions of Indian trade with several regions in 1916–17 compared with the period 1909–10 to 1913–14; Japan and the United States showing an increase (per cent.) both in exports (from India) and imports (into India), and other foreign countries a decrease in

both; the British Empire a considerable increase in exports, a slight decrease in imports. For the absolute quantities a correction is necessitated by the rise of prices. Had the level of prices of 1915–16 prevailed, exports would have been £135,551,000 instead of £155,436,000.

OBITUARY

WILLIAM KENNEDY.

In the December number of the Journal it was only possible to record the death of Lt.-Col. Kennedy.

He was born in December 1885, and was educated at the High School of Glasgow from 1897 to 1903 and at the University from 1903 to 1909, taking the M.A. degree in 1907 and first-class honours in Ecomonic Science in 1908, besides the Gladstone Memorial Prize and the John Clark Scholarship in Economics. His university career was almost coincident with his apprenticeship to chartered accountancy, but his interest in economic studies turned him away from the success promised by that profession when he had obtained his qualification in it. He had already taken part in Mr. Tawney's 1907 investigation into boys' employment in Glasgow, and the Carnegie Trust gave him a Research Scholarship in 1909 for work to be done concerning theories of the distribution of taxation in the 19th century. Next year he was elected to a research studentship at the London School of Economics, which resulted in the publication, in 1913, of *English Taxation, 1640–1799, An Essay on Policy and Opinion,* and the attainment of the London B.Sc.(Econ.) degree. His book is reviewed by Dr. J. H. Clapham in the Journal for 1914, p. 267 ff. Not considering his education yet complete, he obtained a further Carnegie grant for the study of German theories of foreign trade, and spent all 1913 at Munich, Leipzig, and Heidelberg. He then returned to teach at Wren's and the School of Economics, and to marry Miss Olivia Powell. The outbreak of war caught him and his wife on their honeymoon in the Tyrol. At the end of 1914 he joined the Inns of Court O.T.C., was Captain in the 18th Highland Light Infantry by April, and won the M.C. in the Somme fighting of July. Recognised as extraordinarily efficient, he was put through the Senior Officers' courses and became Major in March, 1917, and Acting-Lieutenant Colonel to a Welsh Regiment in July. He was killed while leading a charge against an enemy counter-attack on November 23rd in Bourlon Wood.

In him British economics has lost one who would have stood well outside the ruck, as is well shown in the following words received from one of his friends at the School of Economics : "Now that I come to write I find it very difficult to give any description of him which will really sum up his personality. His influence on the younger men and women at the School was profound, but it was negative rather than positive. His own philosophical position was dominated by the idea that individuals count only as members of an organised society—he was if you like, an Hegelian, but I think he was really an Elizabethan in his outlook on life; his ideal was a 'well-ordered society' in which there were definite classes, all with their proper place and function marked out for them. Yet he really understood and sympathised with the workers, while believing Radical philosophy completely at sea in pitying their lot. It is easy to see how this fascinated us and how strong an impression he made with it added to his brilliant dialectical powers and his personality. He took relatively small interest in the problems of pure economics—he always disliked the 'Hedonic assumptions of the marginalists.'

"He was a strong believer in Protection, not on economic but on Imperial grounds. He always argued from the central position which I have described, never swerving from what he thought to be the true philosophy of life. On his last leave he and I had been to a lecture by Graham Wallas, and I remember his maintaining that, war or no war, life was a good thing, and would still be so even if, after this war, the race of armaments should begin again. Another thing he said then is the clue to all his thinking : 'You Radicals are always talking about the State and the Individual. I like the attitude of the Frenchman. He says "I *am* the State," and there's an end to it.' In his case the end was nearer than we thought, but it was one which was not unworthy of his beliefs."

E. C.

CURRENT TOPICS.

A COMMITTEE has been appointed to consider the various problems which will arise in connection with currency and foreign exchanges during the period of reconstruction, and to report upon the steps required to bring about the restoration of normal conditions in due course. Its members are Lord Cunliffe, chairman, Sir Charles Addis, Hon. Rupert Beckett, Sir John Bradbury, Mr. G. O. Cassels, M. F. Gaspard Farrer, Hon. Herbert Gibbs, Mr. D. H. N. Goschen, Lord Inchcape, Mr. R. W. Jeans, Professor Pigou, Mr. G. F. Stewart, and Mr. William Wallace. Mr. G. C.

Upcott, of the Treasury, will be secretary. The inclusion of a professional economist in a committee dealing with monetary technicalities is gratifying.

Among the officers bearing the rank of assistant-secretary who will take charge of the sections in one or other of the two main Departments of the reconstituted Board of Trade, as described on an earlier page, several contributors to the Economic Journal are conspicuous: Mr. Percy Ashley, *Industries and Manufactures;* Mr. S. J. Chapman, *General Economic Department;* Mr. A. W. Flux, *Statistics.*

A Consumers' Council has been constituted at the Ministry of Food, under the presidency of Mr. J. R. Clynes, M.P., the Parliamentary Secretary of the Ministry. The object of the Council is to enable the consumer to be kept in touch with the policy and organisation of the Ministry. Its members consist of three representatives of the Parliamentary Committee of the Trade Union Congress, three representatives of the National War Emergency Committee, six representatives of the Parliamentary Committee of the Co-operative Congress, and three representatives of the Women's Industrial Organisation, appointed by these bodies at the invitation of the Minister of Food. Three other members (Lady Selborne, Lord Rathcreedan, and Professor Sir William Ashley) were subsequently added by Lord Rhondda's invitation, to represent the general consuming public not covered by the national organisations referred to. The first meeting was held on February 1, and at present the Council meets weekly.

The Select Committee appointed by the House of Commons to investigate the question of Premium Bonds has lately reported (H. of C., 168, price 1*d.*). The Committee are of opinion that Bonds repayable after a fixed term of years, *e.g.* 10, at par plus compound interest at a rate not less that 2½ per cent. would probably attract many small investors to whom the ordinary flat rate of interest does not appeal. But the proposal to introduce an element of chance into our National Finance seems to them too contentious for the present times.

In this connection we give our readers the advantage of an opinion based on long experience of credit transactions. The Nestor of the banking world, Sir R. H. Inglis Palgrave, con-

sulted by us about the Report of the Select Committee, referred to above, replies as follows:—"The Report proposes that the Bonds should be repayable after a fixed term of years at par plus a moderate rate of compound interest, not less than the 2½ per cent. now paid on the Government Savings Bank deposits and having the feature that a certain number should be drawn each half-year for payment at a premium over and above the issue price, both interest and premium being paid free of tax. An example of such an issue would be as follows. The Bonds might be issued by the Treasury in series of £10,000,000, as and when required, and be repayable in 10 years, with 2½ per cent. compound interest, free of tax. The difference between 2½ per cent. and 4 per cent.—the latter being the current rate of interest on tax-free Government Bonds—leaves a balance of 1½ per cent., which would provide an ample fund out of which substantial premiums could be paid on many thousands of Bonds drawn and paid off half-yearly, the premiums ranging possibly from £5 to £1,000. Bonds not drawn would be repayable on maturity at 26*s*. (for each £), that sum representing the capital value together with compound interest at 2½ per cent. To make this statement clear to the "man in the street," the Government should print a detailed account showing how many Bonds of a series of £10,000,000 would receive premiums and what those premiums would be, and when the repayments would take place. The Bonds would be all equal in amount, £10 would be the best unit. It is possible, though not very likely, that such a proposal would appeal to a sufficient number of persons to make it useful. The element of "chance" in this form does not seem to be likely to be dangerous, and the possibility that the habit of economy would be strengthened by such a form of investment might be set against this danger. But it seems not very likely that many persons would accept such a security. If the drawings were arranged, as appears intended, to repay the investors in ten years by half-yearly drawings of £500,000 each, the owner of a bond might have to wait 9 or 10 years before his bond was drawn, meanwhile he would receive no interest and hold a security which would probably be unsaleable."

Sir Inglis illustrates the working of the proposed system by the somewhat analogous, but not identical, case of the Premium Bonds issued by several foreign countries. "They return to the holder a but comparatively low rate of interest. Besides this, at fixed periods premiums are offered on a few of the Bonds that are drawn. "I will give," he continues, "the instance of the drawing

of the bonds of the Crédit Foncier of the 12th January, 1916. On this occasion 114 Bonds were dealt with. They were all for £10 on which 3 per cent. was regularly paid. They formed part of a very large mass of such bonds.

1	Bond was paid off with	£4,000 cash.
1	,, ,, ,,	£400 ,,
12	Bonds were paid off with	£40 ,,
100	,, ,, ,,	£20 ,,

It is to be observed that while some of the Bond holders gain, and largely—no one of them loses, as all the Bonds which are not paid off at a premium are paid off, eventually, at par."

SIR EDWARD HOLDEN'S address to the shareholders of the London City and Midland Bank last January contained a luminous account of German Finance; showing the part played by Darlehenkassen Notes and Treasury Bills in forming legal cover for the Notes of the Reichsbank. The ratio of cash to liabilities declined from 63·4 per cent. in July, 1914, to 20 per cent. in 1917, or only 13 per cent. if Darlehenkassen Notes are not counted as "cash." The seven War Loans of Germany, together with a floating debt of some £1,540 millions; form a total of just over £5,000 millions, against total cash borrowings in this country just under that huge sum. Sir Edward Holden deals next with American Banking and Loans. Then, turning to our country, he makes a vigorous attack on the Bank Act of 1844. But for that Act it might have been possible, he suggests, to get through the crisis of 1914 without a moratorium. According to the Bank Statement of August 5, 1914, the ratio of cash balance to liabilities in the Banking Department was 14·6 per cent. Whereas a balance-sheet, reconstructed on principles adopted by the State Banks of other countries, shows the ratio of cash to liabilities at that date to be 37 per cent. The fact that the time for the revision of the Bank of England's Charter has now come makes Sir Edward's polemic the more formidable.

THE issue for 1917 of the *Financial and Commercial Review* published annually by the Swiss Bank Corporation includes, as usual, some very valuable statistics, as well as an instructive summary of the financial events of the year. In particular, the appended statement of the Gold Reserves and Note Issues of the principal banks of the world is of so high interest as to deserve reproduction. One figure of importance it is possible to state authoritatively now for the first time; after concealing the figures of its balance-sheet since the outbreak of war the Bank of Austria-

Gold Reserves and Paper Circulation with Percentage of Gold to Notes.

Unit: One Thousand Pounds.

	June, 1914.			December, 1914.			December, 1915.			December, 1916.			December, 1917.		
	Gold.	Notes.	%	Gold.	Notes.	%	Gold.	Notes.	%	Gold.	Notes.	%	Gold.	Notes.	%
A. Belligerent Countries :—															
Great Britain [1]	40,085	29,784	134·6	87,994	74,617	117·9	79,976	138,434	57·6	82,805	189,820	43·6	86,837	258,726	33·6
France [2] ...	162,307	242,046	67·0	166,338	401,716[5]	41·4	200,611	532,394	37·6	135,313	667,153	20·3	132,577	893,472	14·8
Russia [2] ...	159,975	163,037	98·1	155,467	298,433	52·1	161,132	549,337	29·3	147,237	889.685	16·5	129,523	1,836,217[7]	7·0
Japan ...	21,867	32,722	66·8	21,883	36,044	60·7	24,927	39,638	62·8	38,748	52,911	73·2	63,137	67,000	94·2
Germany [3] ...	65,308	120,329	54·3	104,641	318,150	32·8	122,259	457,250	26·7	126,024	552,733	22·8	120,280	878,387	13·7
Austria-Hungary	52,295	96,881	53·9	45,000	200,000[4]	22·5	42,000	240,000[4]	17·5	28,000	440,000[4]	6·4	10,568	708,000[6]	1·5
Italy ...	—	—	—	—	—	—	60,560	202,004	30·0	52,696	252,820	20·8	50,250	388,720[8]	13·0
U.S. of America	—	—	—	—	—	—	—	—	—	—	—	—	608,088	770,712	78·9
Total ...	501,837	684,799	73.3	581,323	1,328,960	43.7	691,465	2,159,057	32.0	610,823	3,045,122	20·0	1,201,260	5,801,234	20·7
B. Neutral Countries :—															
Italy	60,680	102,140	59·4	61,472	143,200	42·9	—	—	—	—	—	—	—	—	—
U.S. of America	367,735	535,993	68·6	363,195	536,055	67·7	462,489	611,991	75·5	572,968	699,745	81·9	—	—	—
Spain ...	21,264	75,686	28·1	22,924	79,128	28·9	34,689	84,007	41·3	50,036	94,403	53·0	78,672	111,313	70·7
Denmark ...	4,565	8,879	51·4	5·288	11,479	46·0	6,184	12,247	50·4	8,832	15,826	55·8	9,662	18,770	51·5
Holland ...	13,386	25,313	52·8	17,343	39,426	44·0	35,765	48,096	74·3	48,967	63,198	77·5	58,772	74,487	78·9
Norway ...	2,707	6,433	42·0	2,298	7,390	31·1	3,705	8,935	41·4	6,790	13,866	48·9	6,414	17,985	35·7
Sweden ...	5,823	12,086	48·1	6,029	16,712	36·0	6,920	18,216	37·9	10,195	23,195	43·9	13,580	30,893	44·0
Switzerland ...	7,033	11,411	61·6	9,006	18,624	48·3	10,005	18,624	53·7	13,800	21,460	64·3	14,306	28,092	50·9
Total ...	483,193	777,941	62·1	487,555	852,014	57·2	559,757	802,116	69·8	711,588	931,693	76·4	181,406	281,540	64.4

[1] Currency Notes included, but exclusive of deposits with the Bank of England. [2] Gold in hand. [3] Inclusive of Notes of the War Credit Institutions. [4] Estimated, the publication of the weekly statements of the Bank being suspended since outbreak of war. [5] December 24th. [6] December 7th. [7] October 29th. [8] November 30th, including State Notes.

Hungary at last, on December 7, 1917, published the astonishing fact that its gold reserve had fallen in absolute amount from £52,295,000 to £10,568,000 and in proportion to note issue from 53·9 per cent. to the extraordinary figure of 1·5 per cent. The gold has doubtless been lost in part to Germany and in part to Turkey. The deliberate publication of these alarming figures at the moment of a strong peace movement throughout Austria, and of a great stirring of anti-German sentiment, can hardly have been without a purpose.

THE figures for India (not included in the table opposite) are separately stated as follows:—

	Dec. 31st, 1914.	Dec. 31st, 1915.	Dec. 31st, 1916.	July 31st, 1917.	Dec. 31st, 1917.
Note Issue	6,083 lacs	6,234 lacs	8,215 lacs	9,931 lacs	10,831 lacs
Silver, Coin and Bullion	2,987 ,,	2,944 ,,	1,736 ,,	2,638 ,,	1,905
Gold, Coin and Bullion (in India)	931 ,,	1,275 ,,	1,191 ,,	703 ,,	2,673
Gold, Coin and Bullion (out of India) ...	765 ,,	615 ,,	1,192 ,,	442 ,,	105
Indian Government Securities	1,000 ,,	1,000 ,,	1,000 ,,	1,000 ,,	1,000
British Government Securities	400 ,,	400 ,,	3,096 ,,	5,148 ,,	5,148

(1 lac = 100,000 rupees = £6,666 13s. 4d.)

THE figures given in the table for Russia are those for the last return published before the Bolshevik Revolution. The further progress of events since that time renders it possible that there may be a complete breakdown of the acceptability in Russia of the paper rouble comparable to that which took place in the case of the French *assignat* in 1795 as described by Mr. Hawtrey in his article printed above. Mr. Hawtrey's main thesis in this article is that the Bank Restriction of 1797 is chiefly to be accounted for by the drain of metal to France consequent on the collapse of paper as the circulating medium of that country. He has suggested to the Editor that something of the same kind may possibly be imminent in Russia. A country which, through distrust of other media, is determined to have a metallic currency at all costs is generally able, so far as historical experience goes, to obtain it, however seriously the apparent balance of trade may be adverse. In this event we may anticipate a drain of gold to Russia from Germany and Scandinavia and a drain of silver from China and even, across the north-west frontier, from India. The effect of this on the relative redundancy of gold in Scandinavia and on the

already excessive price of silver may be watched with interest. The hypothesis is, at the least, curious.

THE following extract, relating to Brazil, from the January circular of the British Bank of South America is of interest to students of currency. "There is a great shortage of gold in the Rio market. At the time of writing 1,000 sovereigns could be exchanged for a bank cheque on London for about £1,160. Curiously enough, other gold coins do not command quite so high a premium. Thus, 1,000 sovereigns are intrinsically worth about 4,870 U.S.A. dollars, but in actual practice 1,000 sovereigns can be exchanged in this market for over 5,000 gold dollars. It is not easy to explain this anomaly, but something is, no doubt, due to the fact that the American men-of-war calling at this port pay their men in gold coin, and hence a certain amount of American gold is put into circulation here."

THE Labour Co-partnership Association have arranged a series of conferences and discussions on *The Place of Labour Co-partnership in Social Reform*. Addresses have already been given by Mr. E. O. Greening on "Labour Co-partnership as the shortest way to Emancipate Labour," and by Mr. E. W. Mundy on "The Relation of Labour Co-partnership and the Whitley Report." Further addresses, still to come, are by Mr. F. Maddison (March 23) on "The Relation of Labour Co-partnership and Trade Unionism," Mr. Aneurin Williams (April 13) on "The Relation of Labour Co-partnership and Socialism," and by Mrs. Victor Branford (April 27) on "The Relation of Labour Co-partnership and Guild Socialism." The meetings are held at 3 p.m. on Saturday afternoons in the Oak Room (2nd floor), Kingsway Hall, Kingsway, London, W.C.

RECENT PERIODICALS AND NEW BOOKS.

Journal of the Statistical Society.

JANUARY, 1918. *Vital Statistics as Affected by the War.* Presidential address of SIR BERNARD MALLET. Between August, 1914, and June, 1917, there have been married 200,000 people more than ordinarily, whereas in Hungary the number is *less* by 600,000. All the belligerents have suffered by decline of births: in the United Kingdom, equivalent to the loss of over six months' normal births; in Germany, a loss of seventeen months' births; in Hungary, of twenty-four months' births. Equally interesting statistics are presented under the headings *Illegitimate Births, Sex Ratio at Birth, Infant Mortality, Deaths, Overlaying of Infants, National Increase,* etc.

The Prospects of the World's Food Supplies after the War. SIR HENRY REW. There is ground for hoping that the quantity of bread-corn in the world will be sufficient to meet the world's demand, that there will be meat enough to satisfy carnivorous Europe—assuming that the food can be shipped.

On the Value of a Mean as Calculated from a Sample. Whereas if x is the mean value of a certain character in a population numbering N, the chance that the mean of a sample of size n should differ from x by as much as d is given by a well-known formula, assuming that $\frac{n}{N}$ is negligible; it is shown how this chance is altered if $\frac{n}{N}$ is not neglected.

On Life-tables. Professor R. E. Lehfeldt.

The Quarterly Review.

JANUARY, 1918. *The Trade Corporation.* SIR INGLIS PALGRAVE, F.R.S. The oldest authority on banks gives his blessing to the youngest institution of that class. Sir Inglis expects that there will be scope for the trade corporation in reviving our canals and fostering small local industries. He hopes that foreign industries will not be exclusively promoted by the new institutions. He regrets their connection with the Government. The required funds might be raised by premium bonds of £10 or £20 bearing a low interest, with the chance of a prize.

Edinburgh Review.

JANUARY, 1918. *The Finance of the War.* THE EDITOR. Mr. Lloyd George's two war budgets and Mr. Bonar Law's budget of this year imposed too little taxation. Mr. McKenna mis-

managed the income-tax on wages. There is required "an expanded and carefully graduated income-tax levied upon the whole nation from the poorest to the richest, and . . . taxes upon every form of unnecessary or extravagant expenditure."

Nineteenth Century.

FEBRUARY, 1912. *The Conscription of Wealth.* J. A. MARRIOTT, M.P. A recent manifesto of the War Emergency Workers' National Committee exhibits an unreasonable prejudice against capital—a survival, perhaps, of the provocation given by the old-time capitalist employer. Mr. Bonar Law is censured for not having pronounced more decisively against the conscription of wealth to pay off the National Debt after the war—a project more unfair and ruinous than a forced loan, which the Emergency Committee deprecates.

Germany's Financial Outlook. H. J. JENNINGS.

Ways to Industrial Peace: (1) *The Capitalisation of Labour.* RIGHT HON. SIR WILLIAM MATHER. The workman's capital consists in "putting into his work the spirit and push that he puts into piece-work, but with a much higher need of his responsibility." This spirit would result in at least one-third more output. (2) *The Commercialisation of Labour.* YVES GUYOT. The organisation of labour should be effected by joint-stock labour companies—cō-operative societies without plant or working capital—whose function would be to negotiate and secure the execution of labour contracts.

Fortnightly Review.

JANUARY, 1918. *Wages, Prices, and Supplies.* ARCHIBALD HURD. The Government have mismanaged money matters, and have not followed the writer's advice about the supply of ships. *Currency Inflation and the Cost of Living.* WALTER FORD. *Problems of Finance.* OSWALD STOLL.

FEBRUARY, 1918. *A Capital Levy.* J. E. ALLEN. Our huge war debt, which has led to the cry for a Capital Levy, is mainly due to the failure to impose taxation and to the enormous sums paid in wages. It is unjust that Labour, which has done most of the "profiteering," should impose the burden on the small class of property-owners.

Contemporary Review.

DECEMBER, 1917. *Conscription of Wealth.* COOKE TAYLOR, M.P.

Better Business.

NOVEMBER, 1917. *The need for an Economic Institute in Dublin.* G. D. CUMMINS. An institute on the lines of the Music Social in France and the Agricultural Institute at Rome is desiderated. *The Rural Co-operative Movement in France.* EPAMINONDAS. *Co-operative Fishing.* A. J. MACG. A description of the Aran Co-operative Fishing Society flourishing at Kilmurvey. The

members now receive more than double the prices for fish which they received two years ago. *German Co-operators and the War.* F. E. MARKS. Extract from a German secretary's report. *Co-operators and the Government.* CRUISE O'BRIEN. The political representation of co-operators formulated at the Co-operative Emergency Congress at Westminster is justified by the Government's neglect of consumers' interests and organisations. "There is absolutely no case for regarding the savings of the C.W.S. or distributive societies as excess profits," or profits in any relevant sense.

The Bankers' Magazine.

JANUARY AND FEBRUARY. *Monetary Policy.* J. C. SMITH. "In view of the great interest attaching to currency problems," the editor gives publicity to these papers, though inclined to take exception to some passages. Perhaps the following was among them. "The only fair system for regulating prices is to fix all commodities, all rates of hire of capital and land."

Bengal Economic Journal.

JANUARY, 1918. *Recent Problems of Indian Currency and Exchange.* C. J. HAMILTON. The recent crisis reveals defects in currency administration. *The Transferability of Occupancy Holdings in Bengal.* K. MUKKERJEE. *The Early History of the Tea Industry in North-East India.* HAROLD H. MANN. The first tea good enough to send down to Calcutta, made in Assam, was produced in 1836. Government bore the expense of the experiment, which ultimately proved a commercial success.

The Quarterly Journal of Economics (Cambridge, Mass.).

NOVEMBER, 1917. *The War Tax Act of* 1917. F. W. TAUSSIG. A lucid analysis of the new taxes; among which the tax of 8 per cent. upon the excess of individual incomes over $6,000 is noticed as objectionable, subjecting the higher earned incomes to heavier taxation than property incomes of the same range.

The Value of Money. A. C. PIGOU. A variant of Irving Fisher's equation of exchange is proposed as a "more completely foolproof tool for holding together the complex causes affecting the value of money." That the different symbols do not denote each a separate independent cause is pointed out in the course of useful lessons on the relations of supply to demand.

The Concept of Normal Price in Value and Distribution. F. A. KNIGHT. *Value Theories Applied to the Sugar Industry.* PHILIP G. WRIGHT. The official reports about this industry afford remarkable verifications of the received theories as to increasing and decreasing returns, production on a large and small scale, varying costs, and economic rent. *The Adjustment of Labour Disputes Incident to production for War in the United States.* L. B. WEBLE. *The Revenue System in Kentucky: A Study in State Finance.* ANNA YOUNGMAN.

The American Economic Review (Cambridge, Mass.)

DECEMBER, 1917. *The Law of Balanced Return.* A. S. DEWING. A study on the function of the entrepreneur, with reference to factors of production and the law of decreasing returns. *The Basis of War-time Collectivism.* J. G. M. CLARK. Government should help employers to be more efficient producers of goods for the uses of society. Something like Taylor's "Scientific Management" may have possibilities under an organisation more democratic than the present management. *The War Revenue Act of 1917.* R. G. BLAKEY. The writer apprehends inflation, and recommends that heavier taxation should be adopted. *Canadian War Finance.* O. D. SKELTON.

Journal of Political Economy (Chicago).

NOVEMBER, 1917. *Fundamental Factors in War Finance.* FRANK ANDERSON. Fundamental truths support a strong argument in favour of taxation rather than borrowing. Forms of taxation are suggested. Loans to the Allies guaranteed by Government are deprecated.

Taxation versus Bond Issues for Financing the War. E. DANA DURAND. The surplus of current income is the principal source of funds for financing the war. "The idea that the burden of war expenditures can be deferred to future generations is the supreme fallacy of finance." "If we could assure ourselves that the distribution of taxes after the war would be as just as . . . during the war, there would be little choice between taxation and borrowing" (were it not for the danger of *inflation*). But after the war, the patriotism of the rich waning, it would be less possible to secure equitably progressive taxation. What would be a fair apportionment of burden is suggested with reference to the distribution of American incomes. Assuming a fourth of the total national income to be required, it proves impossible to finance the war (1) through the contributions of the rich alone, (2) by an equal rate of contribution from all. The rates should vary from 10 per cent. of small incomes to 75 per cent. of large. To levy so much by taxation need not dislocate business, if net income only is taxed. However, loans leave a convenient discretion to the contributor, and his "psychology," affected with the aforesaid fallacy, makes them more acceptable.

Industrial Conscription. H. G. MOULTON. The twenty thousand million dollars worth of requisites of the war are to be obtained by transference of labour and enterprise from the production of luxuries, either through ordinary economic motives (involving high prices as compensation for risk), or by commandeering labour after the example of Germany, France, and, latterly, England. The all-importance of *time* decides for the second plan; we cannot wait for public economising to force readjustment through the decline of profits.

DECEMBER, 1917. *The Making of Rates for Workmen's Compensation Insurance.* E. H. DOWNEY. *Social Value and the Theory of Money.* WALTER STEWART. An exposition and criticism of Professor B. M. Anderson's theory of the "social value" of money. *The Surplus in Commercial Banking.* HAROLD G. MOULTON. *Profit in the United States.* BORIS EMMET.

Political Science Quarterly (New York).

DECEMBER, 1917. *Social Welfare in Rate-making.* R. T. BYE. The opportunity of promoting welfare by regulation of fares and rates is found to be less than in the case of some Government-owned public utilities in Europe. *The Workmen's Compensation Cases.* T. R. POWELL. An examination of some American legal decisions.

Annals of the American Academy of Political and Social Science (Philadelphia).

NOVEMBER, 1917. *The World's Food* is the subject of this number. It leads off with an article on *The World's Food Supply,* showing that Europe takes the lead in the production of the staple articles of food. *International Rationing,* it is maintained in another article, has come to stay. *Food for the Allies* forms a division of this subject, comprising *The Food Problem of Great Britain,* treated by ARTHUR POLLEN. In the international arrangements for the distribution of food, which will be necessary for some years of the war, those who were the cause of the trouble should be served last. *Food Utilisation and Conservation, Production and Marketing Plans for Next Year, Price Control,* are the respective titles of three other parts. Under the last head the necessity for Government regulation of prices in war time is maintained.

JANUARY, 1918. *Financing the War* is the subject of this number. A few only of the numerous important articles can be noticed here.

Loans versus Taxes. E. R. A. SELIGMAN. "Aggregate sacrifice or subjective cost constitutes the real burden of a war." Objective costs are mostly borne *at present* (if we except deterioration of capital and strain of overwork). But subjective sacrifice may be diminished when part is transferred to the future by credit. "Just as in private credit the aggregate burden of gradual repayment is less than the sacrifice involved in outright provision of the original amount, so in the case of public credit the social sacrifice involved . . . is less than the burden involved in providing the entire amount in a lump sum." The case for public credit is in some respects the stronger. Expenditure in a legitimate war is not wholly "unproductive." The writer does not accept Prof. Durand's argument in favour of taxes only (referred to above, p. 130), nor that of Prof. Pigou (referred to in the ECONOMIC JOURNAL, Vol. XXVI., 1916). As to inflation, taxes as well as loans will occasion resort to bank credit. "Wars are always attended by inflation." Taxation is inadequate to meet the entire expenditure. "If England were to tax the entire available social surplus through the highest possible income-tax and excess profits tax, the total revenue would be absurdly short of meeting the war expenditure." If the taxes are so high as to discourage industry, they will obviously dry up the source of future incomes and thus deplete . . . the surplus which would otherwise be available for future loans." The enthusiastic plan of financing the war "mainly, if not

entirely," from taxation, and even the 55 per cent. programme are beyond the practicable.

The Financial Situation. F. W. TAUSSIG. "A general survey," comparing the presumable expenditure for 1917–18, viz., nineteen thousand million dollars (£4,750,000,000), with the sources of revenue, more promising than in former exigencies. Sources still unutilised are the taxation of prosperous workers and the broad distribution of public loans—minimising the evils of public debts.

Borrowing as a Phase of War Financing. H. C. ADAMS. To assist the difficult readjustment of industry to war purposes is a function of "credit financiering." It is proposed to issue bonds guaranteeing a certain return to producers of articles required for war purposes, *e.g.*, farmers and factory owners. The guarantee of wages also might be "covered by the use of public credit." Thus the immediate necessity for ready money collected by taxation would be reduced.

Loans and Taxes in War Finance. O. M. SPRAGUE. If the war was financed by taxes, civilian expenditure on luxuries—*e.g.*, "pleasure automobiles" and "candy and soda fountain syrups"—diverting labour and materials from war purposes, would have been diminished.

Do Government Loans Cause Inflation? J. H. HOLLANDER. The inflation argument against war loans is "a melancholy example of scientific lapse," "a mischief-making error" not verified by experience. The "fantastic possibility of financing the war without resort to loans" is out of the question. The choice is between borrowing, which will supply the nation's needs from savings and new thrift, and "a mischievous mode of forced loan effected by the unchecked expansion of bank credit.

L'Egypte Contemporaire (Cairo).

NOVEMBER, 1917. *Le régime douanier de l'Egypte et ses réformes possibles.* E. PEGNA. An interesting study of the history of the Customs in Egypt, a criticism of the existing *régime*, and suggestions for its improvement after the war when it is freed from the trammels of Turkish tradition. *Étude sur le Reformation des délinquants d'habitude.* M. CALOYANNI. An examination of recidivism by one of the judges of the Mixed Court in Egypt.

Journal des Économistes (Paris).

NOVEMBER, 1917. *Les emprunts.* YVES GUYOT. *L'emprunt français de 1917.* A. BARRIOL. *Les mutilés de la guerre et la vie économique.* A. L. BITTARD.

DECEMBER, 1917. *Le projet de budget de 1918.* YVES GUYOT. *Le contrôle des dépenses publiques en Angleterre.* A. RAFFALOVICH.

Giornale degli Economisti (Rome).

NOVEMBER, 1917. *Sull' aumento di mortalità dovuto alla guerra.* P. CASTELLI. "Critical reflections on statistical methodo-

logy," with especial reference to recent papers by L. HERSCH, W. NIXON, and C. GINI.

DECEMBER, 1917. *Incidenza e pressione dei tributi sulle società per azioni.* B. GRIZIOTTI. *Tavole di mortalità.* G. BALDUCCI.

La Riforma Sociale (Turin).

L'opera Sociologica e le feste Giubilari di Vilfredo Pareto. G. BORGATTA. The festival held last July at Lausanne to commemorate Professor Pareto's having occupied the chair of Walras for a quarter of a century was distinguished by the light thrown on Prof. Pareto's last great work, *Trattato di Sociologia* (a philosophic treatise to which, unfortunately, it has not been possible in a merely *economic* journal to do justice). The analysis of the work, which formed the discourse of Professor Roguin, brings out some of the leading conceptions, such as the distinction between logical and non-logical actions, according as the means adopted are or are not "objectively" directed to the end, the separation of social theories into (*a*) a non-logical instinctive element, and (*b*) a deductive element of which the function is to find reasons for (*a*). The value of this summary is enhanced by the comments of Professor Borgatta.

Un problema del dopo guerra—I salari a premio. A. CABIATI. The need of increased production after the war leads to the consideration of various methods of the scientific organisation of labour.

NEW BOOKS.

English.

CORNER (ALFRED). Mutual Aid in Food Production and Distribution. London: Hadley. 1917. Pp. 86. 6*d*.

[By means of association for mutual aid in the wholesale and retail trade the writer hopes that some 1,000 million sterling per annum may be saved.]

DAWSON (W. HARBUTT). Problems of the Peace. London: Allen and Unwin. 1917. Pp. 365. 7*s*. 6*d*. net.

[The portion of this instructive work which most concerns economists is that in which a commercial boycott of the Central Powers is deprecated.]

EDGEWORTH (F. Y.). Currency and Finance in Time of War. A Lecture. Oxford: Clarendon Press. 1917. Pp. 48. 1*s*.

HENDERSON (ARTHUR), M.P. The Aims of Labour. London: Headley. Pp. 108.

[Of special interest to the economist is the chapter headed "No Economic Boycott." In the interests of world-peace the policy of the Paris Resolutions must be opposed.]

HOVELL (MARK). The Chartist Movement. Edited and completed with a memoir by Professor T. F. Tout. Manchester: University Press. 1918. Pp. 327.

[The author was a scholar of great promise, who was killed in action, leaving this book unfinished.]

KIRKALDY (A. W.). Industry and Finance. War Expenditure and Reconstruction. Edited by A. W. Kirkaldy. Published by

authority of the Council of the British Association. London: Pitman. 1917. Pp. 371. 4s. 6d.

[To be reviewed.]

NEWTON (A. P.). The Staple Trades of the Empire. By various writers. Edited by A. P. Newton. London: Dent. 1918. Pp. 184. 2s. 6d. net.

[One of the Imperial Studies Series, containing lectures delivered at the London School of Economics. Sir A. D. Maitland leads off with a lecture on Oils and Fats in the British Empire.]

NICHOLSON (PROFESSOR J. SHIELD). War Finance. London: King. 1917. Pp. 471.

[Reviewed above.]

SELFRIDGE (H. GORDON). The Romance of Commerce. London: J. Lane. 1918. Pp. 422.

SMITH (JAS. C.). Economic Reconstruction. London: King. 1918. Pp. 23. 6d.

SMITH-GORDON (LIONEL) and STAPLES (LAURENCE). Rural Reconstruction in Ireland. With a preface by George W. Russell (A.E.). London: King. 1917. Pp. 279.

[To be reviewed.]

SPALDING (WILLIAM F.). Eastern Exchange, Currency, and Finance. London: Pitman. Pp. 375. 10s. 6d.

[The monetary systems of the principal Eastern countries are discussed.]

French.

LAVERQUE (B.). L'union commerciale des alliés après la guerre. Hostilités douanières envers l'Austro-Allemagne. Tarifs préférentiels entre Alliés. Paris: Alcan. 1917. Pp. 77. 1.15 fr.

[The writer accepts the resolutions of the Paris Conference, and goes further, recommending on protectionist as well as political grounds an economic blockade of Germany.]

American.

DUNBAR (C. F.). The Theory and History of Banking. Revised by O. M. Sprague. New York: Putnam. 1917.

FILLEBROWN (C. B.). The Principles of Natural Taxation. Chicago: M'Clure. 1917. Pp. xx + 281. $1.50.

[The author, as usual, advocates the Single Tax.]

JOHNSON (EMORY R.) and METRE (TRUEMAN W. VAN). Principles of Railroad Translation. New York: Appleton. 1916. Pp. xix + 619. $2.50.

[The contents of this volume are very similar to that of Professor Johnson's well-known *American Railway Transportation;* but the exact relationship is not indicated.]

SECRUST (HORACE). An Introduction to Statistical Methods. New York: The Macmillan Co. 1917. Pp. 482.

TRYON (ROLLA M.). Household Manufactures in the United States 1640—1860. A Study in Industrial History. Chicago: The University Press. 1917. Pp. vii + 413. $2.

Italian.

BRUCOLERI (S.). I resultati di un sindaccato semistatale, con prefazione di L. Einaudi. Rome. 1917. Pp. 81.

[illegible]OPONTE (G.). Il mercato monetario e la guerra. Rome: Athenæum. 1917. Pp. 159.

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THE ECONOMIC JOURNAL

JUNE, 1918.

A SPECIAL LEVY TO DISCHARGE WAR DEBT

WHENEVER the war ends, it is certain to leave behind it for this country an enormous legacy of internal debt. What this debt will amount to depends, of course, on the length of the war. In his Budget speech Mr. Bonar Law estimated that, if peace comes on March 31st, 1919, the National Debt at that date will be £7,980,000,000. Against this he reckoned that there would be assets in the form of stores and various other things to the value of £672,000,000, and arrears to come in from Excess Profits duty of £500,000,000. When these two items are subtracted from the figure for the National Debt there is left a debit balance of £6,808,000. In this calculation, however, Mr. Bonar Law omitted to allow for the fact that, when the war ends, there will be a large mass of payments falling due to contractors and others working for the Government. To count in, as he does, arrears of incomings without counting at the same time arrears of outgoings does not seem a correct proceeding. I am not inclined, therefore, to follow him in making this large deduction from the face value of the estimated debt. Furthermore, it is necessary to add to it a very large sum, of which the Chancellor took no account whatever, for the inevitable expenses connected with demobilisation. When this sum is brought into account, it would, I think, be optimistic to anticipate that, assuming peace to come on March 31st, 1919, the war and its aftermath will leave our debt figure substantially below the enormous total of £9,000 million.

This figure is, of course, a figure for gross debt, without deduction of sums due to us in payment of loans to Allies, Colonies and Dependencies. Mr. Bonar Law estimates that the total amount of these on March 31st, 1919, will be £1,930 million. Subtracting from this total one-half of the part due from Allies, he gets a remainder of £1,124 million as unquestionably good debt. Now,

if—as in the absence of official information seems reasonable—we assume that the figure for "other debt" contracted by us, as recorded in the Financial Statements, represents roughly borrowings, not separately distinguished, which the British Government has made abroad, the total of our foreign borrowings must have amounted on March 31st, 1918, to about £1,000 million. If, as the Chancellor appeared to anticipate, this sum increases in 1918-19 to about the same extent as our loans to Allies, it will amount on March 31st, 1919 to some £1,300 million. This is roughly equivalent to the Chancellor's figure of unquestionably good debt due to us from Allies, Colonies, and Dependencies. In a very broad, general way, therefore, we may reckon that, out of the total debt of £9,000 million estimated for, about £1,000 million will be due to foreigners, and this £1,000 will be offset by an equal sum due from foreigners and Colonies. This leaves a *net* debt of £8,000 million, practically the whole of which is internal debt. Possibly this figure is on the high side. In the long run it may be hoped that a considerably larger part of the loans to Allies which have been allowed for in it will prove to be recoverable. But, in view of the present military situation and the high probability that the war, instead of ending on March 31st of next year, will extend at least till the close of another campaigning season, the high side is the safe one to be on. Nothing in the argument that follows turns on a few hundred millions, and my figure is a convenient one to work with. That, then, will be taken as the basis of discussion—our external indebtedness roughly balanced by our valid external claims, and an internal National Debt of £8,000 million. Apart from repudiation of this debt—a course which no serious person would consider for a moment—there are three methods by which the situation can be met. The first is the traditional method of raising annually by taxation sufficient money to pay the interest on the debt—interest the amount of which it may be possible later on, if conditions are favourable, to reduce by conversion—and to provide a sinking fund equivalent to, say, 1 per cent. of the principal of the debt. The second method is to raise within a short time by a special levy a very large sum with which the whole of the debt may be paid off immediately. The third method is to compromise between these two: to raise a special levy sufficient to discharge, not the whole, but a substantial part of the debt, and to deal with the rest by the annual provision of interest and sinking fund. The purpose of this article is to discuss the comparative advantages of these different methods.

At the outset, it is necessary to clear the way of a misunderstanding which appears to be somewhat widely entertained. This has to do with the relation, in respect of a war debt, between the present generation and future generations. It is often thought that, when one generation wages a war, the debt which it leaves behind it may be regarded as a share of the war costs passed on by it to posterity. If this view were sound, the question whether this generation ought to collect a large levy to pay off the war debt would depend on the further question whether the war has forwarded or safeguarded the vital interests of future generations. Our judgment upon this political point would determine our economic policy, and no other considerations would have any important bearing upon it. But in fact the view which leads to these results is not sound. It is true that, *in so far as a war is financed by loans contracted abroad*, the present generation escapes the cost of it at the expense of future generations, and could, by paying off those loans out of income, assume that cost to itself. But, as we have seen, the foreign borrowings which the Government has entered into in this war are balanced or more than balanced by loans which it has made to Allies and Dependencies, so that what we are in the main concerned with is an *internal* debt. The relation of the present generation to posterity in regard to this kind of debt is quite different from what it is in regard to an external debt. If it made a levy to pay it off, it would not be assuming for its own shoulders any cost which would otherwise have been met by future generations. This statement does not, of course, mean that future generations have not been injured by the war. They have been injured by it in so far as the present generation has diverted into unproductive channels resources which, apart from the war, would have been employed in building up industrial equipment here or in making interest-bearing loans to foreigners. Nor does the statement mean that future generations have not been injured by the fact that the present generation has chosen to finance so large a part of the war costs by borrowing, and (relatively) so small a part by taxation. For, when the borrowing method is adopted, people tend to realise less keenly the need for economising in immediate consumption and, therefore, draw away less resources from consumption and more from the work of building-up industrial equipment—thus injuring future generations—than they would have done if the weapon of taxation had been handled more courageously. The statement that the imposition of a large levy by the present generation to pay off the debt would not remove any cost from the shoulders of posterity does not deny these

things. They refer to the past; it refers to the future. The point of it is that whatever internal debt (whether principal or interest) posterity will have to pay, posterity also will receive; for the payment made will be made, not from Englishmen to outsiders, but from one set of Englishmen to another. It will be, not a cost to the country, but a transference within it. To the obligation upon taxpayers which the debt involves there corresponds an exactly equivalent right in the group of citizens who hold War Loan securities. Obviously, therefore, the debt that is handed down does not mean or represent the share of the expenses of the war that is put upon future generations. Consequently, the question whether it is better to retain the debt and pay interest upon it, or to pay it off by a special levy, does not turn in any degree upon how far we may think it right that posterity should contribute towards these expenses.

This conclusion, which is, of course, obvious to economists, is a somewhat "dangerous" one. For it suggests the inference that it cannot matter to posterity as a whole how big the internal debt is. That is a serious error. Though the fact that the community owes a great deal of money to some of its members does not lessen its well-being directly, it does, or may, lessen it indirectly. This is a vital point. Indeed, it is one of the pivotal considerations upon which the issue between the plan of continuous taxes and the plan of a special levy depends. In order to make this clear, let us suppose that the choice lies between continuous taxation through income-tax and super-tax sufficient to yield a given sum per year for an indefinite period, and an immediate levy of a sum that would so far reduce the debt as to remove the need for this amount of annual taxation. The fundamental difference between these two plans is that, whereas the one involves a single impost, based in some way or another upon existing productive power, the other involves a continuing impost based every year upon the fruit that the exercise of productive power has yielded during the course of that year. *Prima facie*, therefore, the levy method seems to possess the same sort of advantage over the tax method that an annual duty on the public value of land possesses over a similar duty upon the value of improvements. Under the levy plan, everybody will pay exactly the same amount, whatever he does; but under the tax plan everybody will pay less, the smaller is the income that he provides for himself by work or by saving. It is natural to infer that under the levy plan the productive activity of the country will remain intact, but that under the tax plan it will be checked and ham-

pered. This inference, however, is much too important to be accepted without careful inquiry. Both parts of it are open to dispute.

First, it may be urged that, though the levy plan is now intended to be used once only for the special purpose of reducing an enormous and altogether unprecedented war debt, yet in fact, if it is used once, people will be afraid it will be used again. They will be afraid of this in some degree even if the first levy is made big enough to wipe off the whole of the war debt. For there are many objects of great social utility for which money is urgently needed, and a powerful engine for raising money, when once devised and proved effective, is not likely, particularly if Labour obtains a large voice in politics, to rust for long unused. If the first levy is not made large enough to wipe out the whole war debt, the fear that it may be repeated will be still better grounded; for, so soon as it is accepted as a good device for dealing with one-half of the debt, it is difficult to see what argument can be advanced to prove it a bad device for dealing with the other half. But, if repetition of the levy is feared, it will no longer leave productive activity unaffected. People looking forward will reflect that, the more capital they accumulate, the more they will be called upon to pay at the next levy; and this is exactly the sort of reflection that we have supposed, under the tax plan, to deter them from productive activity. It is not possible to get over this difficulty by any system of guarantees, for no Parliament can effectively bind its successor. We must conclude, therefore, that in real life the levy method will not be altogether without effect in restricting the productivity of the country.

Secondly, it may be urged that, though current opinion regards a high income-tax as injurious to production, there is no real proof that it is so. Some people, no doubt, will work less hard if they know that a quarter of their earnings will be taken away by the State, but other people, anxious to maintain their standard of life, will work harder; while yet others, particularly those men of enterprise and force who value high earnings as evidence of achievement rather than for their own sake, will not be affected at all. It is not clear that the first of these groups will necessarily be larger than the second. This much must, I think, be granted. But the argument has ignored the important fact that income-tax, at all events as at present organised, differentiates very strongly against saving. Income that is spent on consumption pays the tax only once, but income that is invested pays it twice—once in itself and once in the fruits that the invest-

ment subsequently yields. If the nominal rate of a permanent income-tax is x per cent., the actual rate on saved income is $x(2-\frac{x}{100})$ per cent. A nominal (permanent) income-tax at 5*s.* in the £ is thus really a tax of 8*s.* 9*d.* in the £ on income that is invested, and a nominal income-tax of 10*s.* in the £ is 15*s.* in the £ on this part of income. It can hardly be doubted that a tax of this character must, on the whole, lessen the work that people do in the hope of obtaining income to invest, so check investment, and so, through investment, productivity.

Our analysis, so far, has not yielded any decisive results. Both the levy method and the tax method are likely to check productivity to some extent; and, though perhaps it may be claimed that, since the threat of a repetition under the levy method is uncertain and distant, that method is likely to have a *less* deterrent effect than the tax method, the inference is obviously insecure. Hitherto, however, the argument has been abstract and general. It is possible that some more definite conclusion may be obtained if we take account of the concrete financial situation that will present itself at the end of the war. If no special levy to wipe out debt is made, the annual payment in interest and sinking fund on a debt of £8,000 millions will amount to no less than £480 millions. To this must be added some £50 millions for pensions and, say, £280 millions for (expanded) normal expenditure. The whole Budget cannot well be put at less than £800 millions. The importance of this enormous figure lies, not in itself, but in its relation to the money income of the country. It is not, of course, possible to forecast with any confidence what this income after the war will be. That depends in part upon the productivity of the country, and in part upon the level of prices—which in turn is dependent on the currency policy that will be adopted, not in this country only but also in all other important countries. In this connection it should be observed that increased productivity will not increase the money income that has to be set against the money debt, except in so far as the larger real income due to it has an increased money value. If productivity expands, but the aggregate money value of income is unaltered, the real payment which has to be made in interest on the debt will have grown in the same ratio as productivity. This point is important, but it need not be pursued further here. Recognising our inability to forecast what the money income of the country after the war will be, let us suppose for the sake of illustration that, including the income of holders of War Loan, it will amount to £3,000 millions. Then, since any reduction

of war debt must carry with it a reduction in the nominal income of the country equivalent to the interest saved, the following significant inferences can be drawn :—

(1) If none of the debt is wiped off by a special levy the revenue required will be £800 millions, namely, 800/3,000, or 27 per cent. of the national income.

(2) If one-half of the debt is wiped off by a special levy, the revenue required will be £560 millions, namely, 560/2,800, or 20 per cent. of the national income.

(3) If all of the debt is wiped off by a special levy, the revenue required will be £320 millions, namely, 320/2,600, or 12 per cent. of the national income [1]

These percentages, though, of course, they cannot be more than illustrations, are important to our present purpose. For it may be fairly easy to devise a scheme which will raise in taxation 12 per cent. of the national income without seriously injuring and hampering production. But to devise an equally innocuous scheme for raising 20 per cent. will be much harder; and to devise one for raising 27 per cent. *very* much harder. More generally, when the amount of the national money income is given, every extra £50 millions of revenue which has to be raised is more difficult to arrange for satisfactorily and more likely to involve injurious reactions upon national productivity. *Consequently, every addition to the size of the Budget which will be needed if no special levy is raised to wipe off debt, makes the chance greater that any given special levy will do more good by lessening the Budget requirements, than it will do harm through the reactions which it itself sets up.*

In the light of this conclusion let us look at the present position. For 1917-18 the revenue was as follows :—

Customs and Excise	£110 m.
Income- and Super-Tax...	239
Estate, etc., Duties	31
Excess Profit Duty	220
Other Tax Revenue	13
Total of tax revenue	613
Non-tax revenue	94
Grand total	£707 m.

The Excess Profits Duty, though it may perhaps be continued at a reduced rate for a few years after the war, is obviously not a

[1] If we had taken the money national income, including debt interest, at 3,500 millions, these percentages would have been 23, 17 and 10 : if we had taken it at 2,500 millions they would have been 32, 24 and 15.

tax that can be retained permanently. Apart from it, the revenue now amounts to some £468 millions. Since, when the excess profit duty is removed, income now taken as excess profits would become liable to income-tax and super-tax, we should add, say, £60 millions to this, making £530 millions in all. This is £270 millions less than the Budget requirements anticipated after the war! With money incomes probably less than they are now (in consequence of a lower level of prices) what taxes relatively innocuous to production is it possible to devise to raise this enormous sum? Except in so far as other duties are imposed—and, broadly speaking, other duties hamper and interfere with production more than the income-tax does—it would seem inevitable that income tax and super-tax, which yielded £239 millions in 1917-18, will have to be raised permanently to double the rates which then ruled. The standard rate of income-tax in that year was 5*s*. in the £, or 25 per cent., and, on the highest incomes, income-tax, together with super-tax, worked out at approximately 8s. 4*d*., or 42 per cent. If this scale is doubled the effect on unearned incomes up to £2,500 and on all incomes above that amount, is illustrated by the representative figures set out in the following table :—

Incomes of	£500	will pay	3/9	in the £	= £93	: leaving	£407
,,	£1,000	,,	5/-	,,	= £250	: ,,	£750
,,	£2,000	,,	7/4	,,	= £733	: ,,	£1,267
,,	£2,500	,,	8/8	,,	= £1,083	: ,,	£1,417
,,	£3,000	,,	10/-	,,	= £1,500	: ,,	£1,500
,,	£5,000	,,	11/3	,,	= £2,895	: ,,	£2,125
,,	£10,000	,,	13/1	,,	= £6,541	: ,,	£3,459
,,	£30,000	,,	15/8	,,	= £23,500	: ,,	£6,500
,,	£75,000	,,	16/2	,,	= £60,624	: ,,	£12,366
,,	£100,000	,,	16/7	,,	= £82,916	: ,,	£17,084

This table exhibits the sort of rates that would be necessary if it were required to raise by income-tax and super-tax double as much money as was raised by these taxes in 1917-18. No doubt, the general arrangement of the income-tax and super-tax scale might be smoothed out and improved in various ways. But no remodelling could do away with the need for rates very high even for small incomes and enormously high for large ones. Furthermore, it must be noticed that in any graduated scale the rate on *an addition* to any income must always be higher than the rate on the whole amount to which the addition raises it. Thus, under the system illustrated in the above table (*i.e.*, the 1917-18 income- and super-tax scale doubled) an income of £1,000 would pay 5*s*. in the £ and one of £1,500 6*s*. in the £. This implies that, if a man by extra saving increased his income from £1,000 to £1,500,

he would have to pay on the fruit of that extra effort, not 6*s*., but 8*s*. in the £. The extra effort that raises an income from £2,500 to £3,000 would be mulcted of no less than 16*s*. 8*d*. in the £; that which raises one from £9,000 to £10,000 of 16*s*. 2*d*.; from £10,000 to £20,000 of 16*s*. 11*d*.; from £30,000 to £40,000 of 17*s*.; from £75,000 to £100,000 of 17*s*. It seems impossible to doubt that these tremendous rates—tremendous even on additions to relatively low incomes—must seriously check enterprise. The gain left as a reward for success in risky undertakings would be so small that many, who would otherwise have adventured out of the beaten track, will no longer think it worth while to do so. The temptation, too, for a rich man to indulge in extravagant consumption will be very great, for, if he saves and so adds to his income, more than three-quarters of the new income so acquired will be swept up by the State. Nor is even this all. It has to be remembered that there are neutral countries that will have no need for these high rates of taxation, and that some of the belligerent countries may remove their need for them by resort to a special levy. Hence men of enterprise and men with large capital will be under a strong temptation to take up their residence elsewhere; for, though by doing this they cannot escape British taxes (or the effect of these taxes upon selling price) on their holdings of British property, they can at least set their prospective new accumulations and personal earnings free from them. The moral of all this is that, if no special levy is made, the rates and forms of taxation, which this country will be compelled to adopt, threaten, in their indirect consequences, very great peril to the productivity of our industry. If only a small or moderate revenue were needed, the advantage to be looked for from cutting down the principal of the war debt by means of a special levy might or might not outweigh the disadvantages. But, with the enormous revenue that will in fact be needed, the scales are no longer balanced. From the side of industrial productivity we are *driven* towards a special levy, as the one way out of a situation which must otherwise prove intolerable.

This conclusion, however, is not by itself decisive. In the choice between different methods of meeting the internal debt, the effect upon productive activity is not the only thing that has to be considered. Attention must also be paid to what is "fair" between different classes of people. To collect all the money needed from persons who happened to have red hair would, for example, be an inadmissible proceeding, however excellent the method might be on the side of production. The policy of a

special levy has, therefore, now to be considered from the point of view of fairness. It is plain that, whereas the taxes ordinarily imposed to meet the recurrent needs of Government are based in some way upon the annual *flow* of different people's incomes, a special levy must necessarily be based on the *fund* of their resources as these exist at some given moment. It, therefore, implies the relief of persons who in future years will earn income by labour of hand and brain and by accumulating new capital, at the cost of present possessors of resources of all kinds and of future possessors of that part of now-existing resources which is capable of being handed down. To this extent, therefore, if the tax method is fair as between future earners and accumulators and the present (and future) possessors of existing resources, the method of special levy must be unfair. But is the tax method fair? In ordinary times, no doubt, when it is a question of financing the normal recurrent expenses of Government, income is the obvious basis upon which the contributions of different citizens should, with suitable allowances and graduations, be assessed. But in a tremendous emergency like this war, ought not the basis to be changed from the flow of income to the fund of resources? Of course, during the actual conduct of the war the things then wanted *must* come out of income, for the simple reason that the great bulk of resources (railway plant, houses, many types of specialised brain power) are embodied in forms not useful for immediate military needs. But this is not inconsistent with the thesis that resources rather than income are the proper basis upon which expenses should be charged. If all resources were in the form of food and shells and guns, it would not, I think, ever occur to anybody to deny this. But once let it be granted, and the fairness of a special levy directly after the war to pay off debt arising out of the war is implicitly admitted also; because this device throws upon the fund of resources a little later on a charge which, it is agreed, we should like, if we could, to throw upon them at the time.

It will have been noticed that, in the above argument, the "fund" which has been contrasted with the flow of income is resources. This term has been used advisedly, because the argument requires us to bring into account, not only material capital as ordinarily understood, but also the "immaterial" capital of mental and manual power. From the point of view of fairness a man's brain is just as properly assessable for the purpose of a special levy as his factory or his house. As a means of providing actual or virtual income, it is on exactly the same footing as they

are. When the general rate of interest is given, the present value of the factory and the brain alike can be derived from the income that they are expected to yield before they wear out. It must, indeed, be observed that what is counted in income from a factory is, not the gross income, but the net income that is left over after enough has been deducted to provide for depreciation. Thus, what is actually counted as income from a factory may be regarded as permanent, and the present value of the factory is roughly the present value of a permanent annuity equal to this assessed income. The income of a man's brain, on the other hand, is counted gross. Consequently, the present value of this piece of capital is the present value of an annuity equal to this assessed income over a period of years measured by the man's expectation of life. Strict fairness demands that the capital value of brain-power calculated in this way shall be set alongside of ordinary material capital and treated jointly with it as the basis of our special levy. Unless this is done the levy will discriminate unfairly against owners of material capital as compared with owners, such as barristers, doctors and prime ministers, of the immaterial capital of trained intellect.

Now, it is generally held by advocates of a special levy that, if such a levy is made, it must, for practical reasons, be confined to material capital and cannot possibly be extended beyond this. If this be so, it will follow that any levy must be to some extent unfair. The next step, therefore, is to inquire whether the unfairness will be so great that the whole plan ought to be abandoned. Plainly, this question is necessary, because, since all imposts are bound to be in some degree unfair to somebody, if the presence of *any* unfairness were taken to rule a tax out of court, it would be impossible to impose any tax whatever. We ask, therefore, whether a special levy, from which immaterial capital is exempt, will be *very* unfair or only a little unfair. Here two lines of reasoning are relevant.

The first starts from the distribution of capital among persons of different ages. From the statistics of estates passing at death it can be deduced that practically all the material capital of the country is held by persons over twenty years of age; that persons over forty-five, who constitute about one-third of these persons, own about three-fourths of the whole; so that the representative man over forty-five holds about six times as much material capital as the representative man between twenty and forty-five. But young men, who excel older men in physical strength, have been

forced to give their physical strength in the war, while older men have been exempted. The fact that old men excel young men so greatly in financial strength suggests that the balance might be partly adjusted, and something less unlike equality of sacrifice secured, by a levy whose incidence would in the main fall upon persons exempted from military service. This argument does not, of course, profess to rebut the charge that a special levy confined to material capital will be unfair to owners of material capital as against owners of immaterial capital. But it suggests, as a partial compensation for this unfairness, that such a levy will go a little way towards setting right another unfairness which is very palpable and glaring.

The second relevant argument concerns the size of the difference which will be made to the levy from owners of material capital if, a given aggregate amount of levy having been determined upon, owners of immaterial capital are exempted. Owing to the fact that "earned income" is interpreted by the Revenue authorities so as to include the earnings of private businesses, which are, of course, largely the fruit of material capital, it is impossible to make this calculation with any approach to accuracy. On the basis of such statistics as are available it may, however, be hazarded that, of income falling within the province of the income-tax, probably as much as three-quarters of the whole is—or, at all events, will be after the war, when War Loan holdings come into the account—due to material capital. Since the largest "earned" incomes are likely to belong to elderly men, the number of years' purchase at which they should be capitalised is presumably small. Say it is on the average ten years. This, with interest at 5 per cent., will make the present value of the existing immaterial capital something like one-tenth of the value of existing material capital. Even, therefore, if no account is taken of the fact that a considerable part of the country's brain-power belongs to people whose total capital is relatively small and would, therefore, under a graduated scale, be subject to a low rate of levy, it will follow that the exemption of brain capital from the levy will not make very much difference to the burden which owners of material capital will have to bear. It will only make this burden, on the average, one-tenth larger than it would have been if brain capital had borne its proper share. If this calculation is anything like correct—obviously, it rests largely on guess-work—the unfairness involved in a special levy from which brain capital is exempt is small. It is not important enough to

rule out of court a method of dealing with the national debt which has been shown to have substantial advantages from the side of production.

So far we have proceeded on the assumption that brain capital cannot be brought under the levy. And it is quite clear that it cannot be brought under it directly in the same way as material capital. If, however, it is held that fairness absolutely demands it, a way out of the difficulty is available. It would be possible to assess upon all persons now paying income-tax upon earned income an additional annual tax for the remainder of their lives, actuarally equivalent to the burden which would have been imposed upon them had they been brought directly under the special levy. The proceeds of the tax should be used, not in paying interest on the debt, but, like the money raised by the special levy itself, in helping to wipe out the principal. From the point of view of production it would, of course, be best that this tax should, if possible, be a fixed annual amount like a rent-charge, and not an amount dependent upon the income actually earned from year to year by the persons made subject to it. Whether on the whole it is desirable that a compensatory impost of this kind should be placed upon the earned incomes of persons now alive, seems to me very doubtful. The chief point in its favour is that its association with the special levy on material capital would emphasise the exceptional character of that levy, and so perhaps slightly mitigate the fear—highly injurious to saving and production—that capital levies, once experienced, will be repeated at short intervals for ordinary revenue purposes. But it is not necessary to my argument to decide for or against this compensatory impost. It is sufficient to have shown that, if a special levy on material capital alone is considered too unfair to be admissible, means exist by which the unfairness can be removed.

At this point, however, another line of argument is encountered. A special levy on material capital may be desirable from the standpoint of productivity, and it may be so arranged as to be free, in theory, from any large element of unfairness; but, say its opponents, it is in practice quite unworkable. For two insuperable difficulties stand in its way, the difficulty of valuation and the difficulty of actually collecting the levy. These difficulties we have now to review. To do this satisfactorily, we need to know in what forms the capital of the country is held, and what is the relative importance of the several forms. Upon this matter no direct information is available. But the statistics of estates

passing at death throw some light upon it. For the fiscal year 1913-14 and 1914-15 the gross capital of which the Estates Duty Commissioners had notice was made up as follows :—

DISTRIBUTION OF PROPERTY.

	Passing at death in 1913–14	Passing at death in 1914–15	Estimated at the end of the war.
Stocks, funds, shares, etc.	45%	39%	60%
Cash in home and bank	6%	6%	4%
Money on mortgage, etc.	7%	6%	4%
Policies on insurance	4%	3%	2%
Trade assets, book debts, goodwill, etc.	5%	5%	3%
Household goods, apparel, etc. ...	3%	3%	2%
Agricultural land	5%	8%	6%
House property and business premises	14%	16%	10%
Ground rents, etc.	1%	1%	1%
Other property	10%	13%	8%
TOTAL	100%	100%	100%

Except in so far as some forms of property evade death duties more easily than others, the first two columns of the above table may be taken to represent roughly the distribution of property among different forms before the war. After the war, however, it may be expected, in consequence of the enormous volume of War Loan securities, that the proportion of the whole represented in stocks, funds, shares, etc., will be very greatly increased. War Loan by itself will very likely amount to one-third of the whole, so that, though there must be set against it a large diminution in our holdings of foreign securities, it may well be that the first item in the table will be raised to 60 per cent. If this happens, all the other percentages must be reduced to two-thirds of what they stood at in 1914-15, and the third column of the table will roughly represent the facts. In that column, then, we have a starting-point for estimating the true scale of the valuation problem.

Clearly, there need be no serious difficulty about the first four items, with the exception, perhaps, of those classes of securities which change hands so seldom that their quotations are more or less fictitious. These items together we have estimated to amount after the war to some 70 per cent. of the whole. Further, the most important of the other items, namely, house property, business premises and agricultural land, could be roughly assessed on the basis of the income-tax returns, appeal being allowed to anyone who felt himself aggrieved. But for trade assets, etc., household goods and apparel, and miscellaneous property, it would seem that the only available method is direct appraisement—

a process which it would take years to apply over the whole country. On the figures given in the table, these items should work out after the war at some 13 per cent. of the whole. But, since they probably evade death duties to a considerable extent, and so are not fully counted, it would be safer to reckon them at, say, 20 per cent. Plainly, to leave them outside our capital levy would be very unfair to owners of other sorts of property, and would be the more objectionable in that it would directly benefit those persons who, during the war, have been trying to evade their obligations to the State by investing their resources in such things as pearls and pictures. On the other hand, the task of a general valuation is so prodigious and would prove so irritating that any Government would think many times before embarking upon it. Here, therefore, is a serious impasse. It would seem, however, that the difficulty might be got over by postponing the levy due from these items and storing it up, as it were, till the next occasion on which they pass at death and so have to be valued in the ordinary course. No doubt, this postponement would offer opportunities for evasion to unscrupulous persons. That, however, cannot be helped. It would be better to accept that loss than to undertake the gigantic task of an immediate general valuation. The evasion and the loss to Government that must result from it is regrettable. But it is not a fatal obstacle to a special levy on capital, any more than the evasion of death-duties and income-tax that now takes place is a fatal objection to these means of raising revenue.[1]

There remains the difficulty of actually collecting the levy. It is often maintained that this cannot practically be done, because, if it were attempted, a vast number of people would be compelled to throw securities and other property on the market in order to obtain the wherewithal to pay the levy, and would find there no buyers. The first and most obvious answer to this objection is that the Government need not require payment of the levy in cash. There is no reason why it should not accept all Trustee securities, and many others in which there is normally a free and fairly wide market, at their market value on some specified day. Of course, if it did this, it would lose through some of these securities falling in value, but, the field being wide, it would probably gain to about an equal extent through others rising. Since then

[1] Since this was written, Mr. Arnold has suggested in the House of Commons an ingenious plan under which, in the first instance, the levy would be collected on valuations made by the owners of capital themselves, the State subsequently going through these valuations at leisure and making the necessary adjustments up or down.

we have reckoned that some 60 per cent. of the capital of the country will be represented by securities, the great majority of people subjected to the levy would probably be able to meet it without making any sales at all. But, even if this were not so, or if, for any reason, the Government decided to accept in payment only a very limited class of securities, the argument here under review would not be valid. For, after all, whatever money is paid over to the Treasury will not be locked up there in a box, but will probably be expended in buying up and cancelling War Loan stock. The people from whom this stock is bought will want other securities instead of it and will, therefore, constitute a market for those that other people are offering for sale in order to raise money for the levy. There should be no difficulty about so arranging things, with the help of temporary loans from the banks, that the Government purchase of War Loan keeps pace with the sale of the other securities, thus making the market for them effective and obviating the need of forced sales.

No doubt, however, certain persons will not be in a position to raise either money or securities to meet the levy upon them, if they are compelled to pay the whole of it at once. Owners of private businesses, the greater part of whose resources is locked up in their businesses, and whose holding of securities is not more than sufficient to provide collateral for loans in case of need, cannot be expected to raise large sums quickly. Some landowners may be similarly situated. It would be necessary to allow these persons the option of payment by instalment, as is done at present under death duties, or even perhaps in special circumstances to accept the payment of interest on the levy, until such time as the property affected was broken up on the death of its owner or otherwise, and the payment of the principal thus became feasible. It is obviously within the power of the Revenue authorities to make satisfactory rules for overcoming technical difficulties of this kind. On the whole, therefore, it would seem that the problem of actually collecting the levy, as well as the problem of valuation, can be adequately solved. The plea that a special levy on capital would be unworkable in practice cannot be sustained.

We come thus to our final problem: What rates ought to be imposed on different capitals and what aggregate amount of levy should be looked for? The first question that has to be answered in this connection is: Ought holdings of War Loan to be placed, in the matter of rates, on the same footing as other capital, or should they be accorded specially favourable treatment? There is clearly no case for the special treatment of War Loan stock which

has been obtained by the conversion of consols or from the proceeds of the sale of other securities held before the war. But some of the War Loan stock which has been purchased with new money has, no doubt, been the fruit of special and patriotic saving, for which some recognition might be claimed. Furthermore, it must be remembered that all capital created with new money during the war has been subjected to a burden, not experienced by the capital accumulated in earlier times, in consequence of the high war income-tax; and War Loan constitutes the predominant part of this war-time creation of capital. Against these considerations has to be set the fact that it would be practically very difficult to distinguish War Loan holdings that have been bought with new money from other War Loan holdings; and still more difficult to distinguish among them those that are the fruit of special patriotic savings from those that have been secured out of abnormal war profits. It has also to be remembered that a special levy on capital will be, to a large extent, a substitute for high continuous income-tax on unearned income, and that nobody has proposed to give income from (ordinary) War Loan any special abatement under income-tax. Probably it would be convenient to privilege War Loan to the extent of accepting it in payment of the special levy on terms somewhat more favourable than are accorded to cash and other securities, but, on the whole, particularly in view of the heavy reduction that any more substantial privilege must cause in the yield of the levy, the case for going further than this does not seem to be made out.

A more difficult question to decide is whether the rates of the special levy should depend simply on the amount of people's holdings or should take account also of the size of their families. There can be no doubt that the present income-tax scheme, under which, except for small incomes, bachelors and the fathers of a number of young children have to pay practically equal taxes, is exceedingly unfair. For income-tax this unfairness could easily be remedied. But with a levy on capital there is the difficulty that a man who was a bachelor at the moment the levy was made might be a family man a few years later, while one who was a family man then might, in a little while, have become a childless widower. Under an income-tax adjusted to family conditions these changes would be allowed for automatically; but, under a levy on capital, since this accomplishes itself once and for all, no allowance for them would be possible. Clearly, therefore, if it is decided to modify the rate of levy according to family conditions, the extent of the modification ought to be much smaller than would be appro-

priate under income-tax. Probably the best that can be done practically is to allow some slight modifications where capitals are small, but none where they are large. We need not contemplate any relief substantial enough to affect seriously the aggregate return from any given scheme of levy. What then should the scheme be, and what yield may be hoped for from it?

In an important paper in the Journal of the Royal Statistical Society (July, 1915), Sir Bernard Mallet and Mr. Strutt have estimated that the capital of the country in private hands in any year is about thirty times the amount passing at death in that year. This " multiplier " is the result of a very elaborate and skilful inquiry, and, though, of course, it is liable to error, for the present it holds the field. For the year 1913-14 Sir Bernard Mallet and Mr. Strutt take the net value of the property passing at death to be approximately equal to the net value of property of which the Commissioners of Inland Revenue have notice for Estate and Probate duty, *plus* an estimated allowance of some £65 millions (including £15 millions as between husbands and wives) for settled property not coming under review. The total amounted to £359 millions. Multiplying by 30, this gives an aggregate of approximately £11,000 millions of property in private hands in the United Kingdom in 1913-14. This figure we may take as a starting point. In order to obtain an idea of the kind of return that any given scheme of levy on capital after the war might be expected to yield, we require some estimate of what the corresponding figure for aggregate capital values in private hands will amount to then.

In August, 1914, a law was passed by which the relief hitherto granted to settled property (other than husbands' and wives') passing at death under the terms of a prior disposition was abrogated. Consequently, some fifty millions of money passing at death, which under the old rule would not have come under the notice of the Inland Revenue Commissioners, and for which Sir Bernard Mallet and Mr. Strutt made an allowance, would under the new rule come under their notice and be recorded. Consequently, had the capital value of property generally remained as before, the value paying estate-duty in 1914-15 should have been some £50 millions more than it was in 1913-14. As a matter of fact, it was only some £10 millions more. The inference is that, in consequence of the war, property in general depreciated in 1914-15 in the ratio of something like 360 to 320, that is, by about 11 per cent. This inference is not a surprising one when account is taken of the great fall in the value of securities, con-

sequent upon the rise in the rate of interest offered for new capital.

After 1914-15 statistics of capital coming under the notice of the Inland Revenue Commissioners are no longer available. We have, however, figures for the yield of the estate duties. The yield in 1916-17 exceeded the yield in 1914-15 by about 12 per cent. In view of the various reliefs that the law accords to the estates of soldiers killed in the war, it is not necessary to discount this increase very greatly on account of war casualties. Consequently, as a very rough statement, we may perhaps conclude that the contraction in the value of property in private hands that took place in the first year of the war had been made good by 1916-17, and that in that year this value had returned to about what it was in 1913-14, namely, £11,000 millions. The recovery was presumably due to the excess of new War Loan holdings over the further depreciation of other property and the loss of foreign securities by sale abroad.

To step from this platform, which is itself extremely insecure, to the probable value of property in private hands when the war and the post-war settlement are over, is, of course, only possible by the help of extremely hazardous guess-work. In April, 1917, internal debt amounted to something over £3,000 millions. We are supposing that, by the end of the war and the settlement, this internal debt will have become £8,000 millions. Consequently, if no other factor comes into play to affect the value of property in private hands, we should expect this property to have increased by some £5,000 millions. Of course, however, other factors will come into play. First, there will be the physical deterioration of a great deal of existing property through inadequate renewals and repairs—against which will have to be set the creation of new property in the iron and steel and other industries associated with the war. Secondly, there will be changes in price level, which must affect the value of such things as house property. Thirdly, there will be changes in the rate of interest. It is impossible to forecast the net effect of these various factors. Since, however, we require some figure, I hazard the guess that, apart from the new War Loan securities, the value of the country's capital will be much the same after the war as in 1916-17. This means that, counting the new War Loan, it will come to somewhere about £16,000 millions, *or half as much again as it was immediately before the war.*

The scale of estate duties ruling from August, 1914 ranges from 1 per cent. on estates from £100 to £500 up to 20 per cent. on

estates of one million and upwards. The yield of these duties in 1913-14 (when estates passing under settlement were exempt) was £21·64 millions. Had the settled estates been included, it would, on Sir Bernard Mallet's and Mr. Strutt's figures, have been about £26 millions. Hence a levy on the estate-duty scale on all property in private hands would have yielded some thirty times this amount, namely, £800 millions. It follows that, *if, after the war, a levy on the estate-duty scale on all property in private hands gives the same proportional return as it would have done in* 1913-14, that return will amount to £1,200 millions. But, in order that the italicised condition may be fulfilled, the new property we are supposing to have come into existence must be spread over the groups subject to different rates of duty in the same ratio as the property existing in 1913-14. This is made obvious by the annexed table, in which are shown for 1914-15 the several rates of estate duty together with the proportion of the taxed property subject to each rate.

Value of estates:	Percentage of total estates falling into this class.	Death-duty scale.
"Small estates"	2·8	—
£100— £500	0·9	1
500— 1,000	3·4	2
1,000— 5,000	14·5	3
5,000— 10,000	9·5	4
10,000— 20,000	11·4	5
20,000— 25,000	4·1	6
25,000— 40,000	8·5	6
40,000— 50,000	3·8	7
50,000— 60,000	6·1	7
60,000— 70,000		8
70,000— 75,000	0·9	8
75,000— 80,000	4·6	8
80,000— 100,000		9
100,000— 150,000	5·7	10
150,000— 200,000	3·3	11
200,000— 250,000	2·3	12
250,000— 300,000	4·6	13
300,000— 350,000		14
350,000— 400,000		15
400,000— 500,000	2·2	16
500,000— 600,000	1·8	17
600,000— 750,000	2·3	18
750,000— 800,000	0·0	18
800,000—1,000,000	1·3	19
Over 1,000,000	6·0	20

Now it is practically certain that, during the war, rich people who have had a greater margin for saving than poor people, will have added to their capital in a larger proportion. Consequently, the percentages in the lower half of the first column of this table, that is to say, the percentages representing capital liable to the higher rates of levy, will have increased, while the percentages in

the upper half will have diminished. It is, of course, impossible to say how large this shifting will have been. Let us suppose that the new capital will be in the hands of rich people in such a proportion that it is on the average subject to double the rate of duty to which capital in general is subject. On this assumption a levy on the estate-duty scale on all property in private hands after the war would yield some £1,600 millions.

If the capital equivalent of the 1917-18 rates of income-tax and super-tax on unearned income are calculated on the basis of a 5 per cent. rate of interest, it will be found that the resultant scale has a rough resemblance to the scale (except in its lowest part) that would be formed by doubling throughout the 1917-18 rates of estate duties. The two scales move upward in the same general way and both come to rest in the neighbourhood of 40 per cent. In view of this fact it must be conceded that a capital levy on a scale double the 1917-18 estate-duty scale would not pass the bounds of what practice is already in effect acquainted with. In view of the extreme financial need we might, I think, venture upon a scale as high as this. On the basis of the calculations set out above, a levy on that scale would yield some £3,200 millions. There is, however, clearly no reason why the upward movement of the scale should stop abruptly, as it would do if the estate-duty rates were simply doubled and no other change made, with fortunes of £1 million. By steepening it at the upper end we might make it yield something more. Yet another addition could be made by bringing under the levy some impersonal property not in private hands, such as investments of insurance companies, a proportion of companies' reserve funds, the property of some corporations, and so on. With good luck our levy might be made to yield not far short of £4,000 millions, or half the anticipated internal debt. If that amount of debt could be wiped off, we should be enabled to dispense with some £240 millions of annual taxation—almost exactly the sum that the income-tax and super-tax brought into the Exchequer in 1917-18, and considerably more than the whole revenue before the war. The help that would be given towards balancing the post-war Budget is therefore real and substantial. If, as many persons may be inclined to think, the national capital ought to be put higher than the figure I have taken, the gain would be *pro tanto* greater.

This discussion, despite the length to which it has extended, does not, of course, profess to be exhaustive. There are many difficult points of detail, such as the treatment of foreign holders of various forms of British property—balances or current accounts

in British banks at the one extreme, house property at the other—the treatment of charitable and educational corporations, and, perhaps, most puzzling of all, the treatment of British holders of 4 per cent. War Loan guaranteed free of income-tax—about which nothing has been said. All these things require consideration. Further inquiry, too, is needed into the statistical side of the problem, and into the exact type of graduation which the scale of rates should embody. Indeed, the whole subject would well repay study by an expert Treasury Committee. For the plan of imposing a special levy on capital after the war is over is not red revolution. It is a policy seriously put forward to meet a financial situation so difficult that *any* method of dealing with it is bound to involve a number of grave disadvantages.

A. C. PIGOU

A CAPITAL LEVY : THE PROBLEMS OF REALISATION AND VALUATION.

THE chief *practical* objections to a Capital Levy may be reduced to two—the difficulties of realisation and valuation. In this article I propose to deal with both these problems.

Apart from the difficulties of realisation there is a common fallacy with regard to a Capital Levy which should perhaps be touched upon first.

It is said that a Capital Levy would absorb liquid capital just at the time when it is wanted most, that is, during the period of reconstruction following the war. Those who make this objection overlook the purpose of a Capital Levy, which is to pay off War Stock. A Capital Levy does not use up liquid capital at all; it merely changes its ownership to some extent. The total amount of liquid capital available in the country would not be altered or diminished a penny piece by the operation. The Levy is for the purpose of paying off War Stock, and in so far as the Levy is paid in cash—and by cash is meant, of course, not only gold and notes, but also cheques and so forth—the Government does not keep the cash, but it will be used by the Government to pay off holders of War Stock. The total amount of cash taken by the Government from individuals under a Capital Levy will be exactly equal to the total amount of cash paid by the Government to other persons, that is, to holders of War Stock. Much of the cash will be used to pay off part of the holdings of banks and large companies, and some cash also will, of course, be paid to individual holders of War Stock. The banks, limited companies, and individuals who receive cash in exchange for War Stock will then have it available to lend or to use in one way or another. On balance, therefore, the total amount of liquid capital in the country will not be altered a penny piece, and its distribution will probably be improved, for by the redemption of part of their War Stock there would be a larger aggregation of liquid capital in a freer form in the hands of the banks and other agencies to which people

are accustomed to go for capital. Moreover, those limited companies which hold War Stock—and nearly all do—would receive cash for part of their holdings. So that the main industrial concerns of the country after the war would, under a Capital Levy, have a larger amount of liquid capital available than they would have under the alternative plan of a high income-tax.

In so far, then, as the Levy is paid in cash, it would mean no stagnation of trade and industry, but I believe that proportionately very little of the Levy would be paid in cash. There is, indeed—at any rate, in theory—no absolute reason why a penny piece of cash should be required for the operation. But I do not wish to examine a scheme which excluded cash altogether, because it would be somewhat inelastic. All I would say is that under a good and easily practicable scheme the amount of cash required would be very much smaller than is commonly supposed, and would constitute no difficulty at all.

I come now to the problem of realisation in order to pay or meet the Levy. It is objected that securities and so forth would be thrown on the market all at once, when there were no buyers about, or few buyers about, and that prices would collapse. In point of fact by four principal methods the whole of the Levy can be paid or met with little or no realisation or selling of securities or property at all.

The first and most obvious method is by payment direct in War Stock, and by that I mean War Stock of every kind—War Loan 1929-47, National War Bonds, and Exchequer Bonds of every denomination, Treasury Bills, and so forth. Any kind of British War Stock could be handed over to the Government in payment of the Levy, and the Government when it received the Stock would simply cancel it. That does not mean that War Stock holders would be in a worse position than anybody else. On the contrary, they would be in a somewhat better position. The price at which the Stock would be taken in payment of the Levy would be so fixed as to give some advantage to War Stock holders. To pay in War Stock would not be compulsory. It would be entirely optional, but it would be encouraged by some advantage in price and also it would be an easy way of paying the Levy and it would undoubtedly be largely chosen.

The second method of paying the Levy without realising stocks and shares is by handing over to the Treasury recognised securities at certain fixed quotations. The Treasury would issue a list of securities which would be accepted in payment of the Levy. Several lists have been issued by the Treasury during the war

for the purpose of mobilising securities. By a somewhat similar operation many recognised securities would be accepted in payment of the Capital Levy. The list would include Colonial Government Stocks, Indian Government Stocks, British Corporation Stocks, Loans of Public Bodies in the United Kingdom, Debentures and Prior Charges of the Home Railways and of the best Colonial and Foreign Railways, and Debenture Stocks and Preference Shares of good companies. All these securities could be handed over to the Government in payment of the Levy. The Government in its turn would have no need to realise. The great bulk of the securities would be speedily exchanged by the Government with War Stock holders under voluntary and agreed arrangements, some slight advantage in price being given to War Stock holders as an inducement to them to make the exchange. All details of these arrangements would be at the discretion of the Treasury. Under them a very large amount of the debt of the country would be dealt with and cancelled. There would, of course, be no compulsion about these exchanges. They would be perfectly voluntary, but many companies and individuals will be very willing to make them, especially in view of the fact that the rate of interest at present yielded by high-class securities is almost certain to go down as years go on, and, therefore, good irredeemable securities with fixed interest are better as a permanent holding than War Stock. In view of these considerations, it is obvious that many companies and individuals would readily exchange on favourable terms, say £10,000 of War Loan 1929-47 for about—at present prices—£15,500 of London and North Western Railway Debenture Stock, and the Treasury would have at its disposal for exchange purposes a large mass of most excellent securities which would have been handed over to the Government in payment of the Levy. For practical purposes these securities are as safe as War Stock, and there is a much greater prospect of them appreciating largely in capital value because they are irredeemable.

It is well known to those in touch with these matters that many companies and individuals have taken more War Stock than they really want. It is true the rate of interest is high, but at this time of great depreciation of gilt-edged stocks, when tempting bargains abound on every hand, many investors would prefer to put their money into such securities yielding a high rate of interest in perpetuity. While many have invested largely in War Stock, others have not done so, but have picked up bargains of low-priced first-class securities yielding a high rate of interest

with perfect safety in perpetuity, and with every prospect of a big appreciation in capital value. War Stock holders, on the other hand, cannot look for much appreciation in capital value, because of the Redemption Clause. It is, therefore, only fair that these matters should be adjusted, at any rate, to some extent, so that War Stock holders will not be penalised as they unquestionably would be under a high income-tax scheme. Under the exchange system which I have outlined it is clear that a big adjustment would take place to the advantage of War Stock holders and also a very large amount of War Stock would be dealt with and cancelled.

The third way of meeting the Capital Levy without realising securities is by credit facilities or alternatively by payments out of income. As regards credit facilities the Government would in the main arrange with the banks for facilities to be given. The capitalists, who would be allowed to resort to credit facilities, or, alternatively, to pay out of income, would be owners of land and real property and men who have their money, or most of their money, locked up in industry and business, as, for instance, in a factory, fixed plant, stocks of goods, and so on. These classes of persons could meet the Levy by giving a mortgage or some other form of security in order to secure credit. The principal way, but not the only way, would be that this arrangement should be made through the banks, and the banks would be guaranteed by the Government against loss. Any loss there might be could only be small, and at the worst would be negligible in proportion to operations of this magnitude. The Government guarantee would mean that the borrower would have the fairest and easiest terms. On the other hand, these operations would not require the provision of cash, nor would they be a drain upon the liquid resources of the banks. Much of the accommodation could be given in War Stock out of the immense blocks of War Stock which the banks hold. The operation would be a very simple one. War Stock would be handed by the bank to the borrower against the security of a mortgage or other form of hypothecation. The borrower would then pay the War Stock over to the Government and the Government would cancel it. By these or similar methods, none of which involve the realisation of securities or property nor the provision of cash, arrangements could be made by the Government whereby those persons who have capital in a form not easily realisable could meet the Levy.

This third method which I have in part described of meeting the Capital Levy deals with the problem that looms largest in

the minds of business men and causes them most doubt and anxiety. I wish to meet it fully and meticulously. It is argued that many men who have money locked up in their business would, rightly or wrongly, and no matter under what guarantee, object to putting themselves in the hands of a bank or to giving any form of security to a bank. It may be replied that the arrangement I propose would be one made with the banks by the Government and it would insure that there should be no harassing by the banks. It would be a special and definite arrangement and specific conditions and regulations would be laid down to safeguard the borrower.

Nevertheless, account has to be taken of prejudice. Some business men would object on any terms to getting credit from or through a bank in order to meet the levy. They would fear that they were putting themselves too much in the hands of the bank, and also that their credit for obtaining accommodation for business purposes might be restricted. In such cases the alternative is clear. The Levy would have to be paid out of income either by way of instalments extended over a period of years or by way of a special income-tax.

People in this position could be allowed to pay the Levy under similar provisions to those which were laid down to meet certain cases under the death duties. For instance, the Levy could be paid in sixteen half-yearly instalments, that is, in eight years, or even over a longer period. Again, if persons in this class could make a case—but only if they could make a case—against paying even by instalments, then they might be allowed to drop out of the Capital Levy Scheme altogether on the terms of paying a special income-tax. An important feature of a Capital Levy Scheme would be to set up Commissions to deal with hard and exceptional cases. These cases could be submitted to a Commission and the Commission would adjudicate upon them. If, for instance, it was urged by an individual that he had no War Stock and no realisable personal property and also that he had valid reasons for not wishing to resort to the credit facilities system, and also had good reasons for not paying the Levy in sixteen half-yearly instalments, it could be arranged in such a case that instead of paying the Levy a special income-tax should be paid. Such a person would be put in the same position as if a Capital Levy had not been made, that is to say, he would have to pay a special income-tax in lieu of the Levy, and provisions would be laid down to meet the case of his death.

The difficulties, however, of landowners and business men

with capital locked up should not be exaggerated. Nearly all of such persons would have some War Stock or some personal property, particularly if they are men of considerable means. If they are small capitalists the amount for which they would be liable under the graduated scale of the Levy would be small, and therefore the problem for them would be much simplified. Further, if people in these classes, and particularly those of considerable means, have no War Stock, or if they have not a fair proportion of War Stock, they have not been doing their duty, seeing that the war has been going on for nearly four years and having regard to all the facilities that have been provided by the Government for acquiring War Stock. In so far as they hold War Stock or personal property, the Levy will present little difficulty to them.

In considering all these questions, it must always be remembered that there are difficulties and hardships in every form of taxation, and not least in the income-tax, especially a high income-tax. This is often forgotten in discussing a Capital Levy, for the tendency is to see only the difficulties in and objections to any new form of taxation. It may be admitted that the cases which I have just been discussing present a considerable problem, and it is these cases which are fastened upon by most critics who oppose a Capital Levy on practical grounds. But the difficulties should not be over-estimated, and I am convinced that every real objection which is brought by people in this class could be met.

To sum up the argument in this section, I submit that the problem of those persons who have their capital locked up is really a much simpler one than is generally recognised. It is not for a moment proposed to compel people in this class to pay or to raise capital in order to meet the Levy when such an operation would cripple them and would be injurious to commerce and industry. The whole matter resolves itself into this—that if a man cannot pay nor arrange to pay in capital, or in so far as he cannot do this, he would be allowed to pay out of income in one way or another. The number of persons, however, who could make out a case for paying wholly out of income would be comparatively small.

The fourth method of meeting the Levy without realising securities or selling property is by direct payments in cash. Not very much would be done in this way. As has been said, the total amount of cash required for paying the Levy would be very small, but there would be a certain number of persons who would prefer to pay some part of their liability direct in cash, either

from cash already on deposit at the banks or out of savings made during the period of the Levy.

By all these various methods the whole of the Levy could, as a matter of fact, be met, without the necessity of realising any securities or of selling any property at all. There would, however, no doubt be cases of persons who, for one reason or another, preferred to sell some securities. The total amount of such transactions would be small, certainly small in proportion to the total Stock Exchange transactions during the period of a year, and it is suggested that a year should be allowed for the payment of the Levy. Further, in so far as there was selling of Stock Exchange securities or other forms of property, it is not the case that there would be no buyers or few buyers on the market. Banks, limited companies, and individuals who were having a part of their War Stock paid off by the Government, would all be potential buyers because they would be receiving cash for a part of their holdings of War Stock, and, therefore, a collapse of prices is out of the question. All these considerations show that the difficulties of realisation and of paying the Levy are greatly exaggerated, and I am satisfied that the whole operation is quite a practicable one.

I turn now to the problem of valuation, and I would first premise that the difficulties of valuation should be looked at in a practical and reasonable way. Ideal perfection and exactitude to five places of decimals is not attainable, and is not in fact attained in any system of assessment for any kind of taxation, and of no tax is this more true than of a high income-tax, which is the only alternative to a Capital Levy. But the objection that it is impossible to make a fair valuation of all the various kinds of property cannot be admitted. The most obvious reply is that a valuation is made for the death duties, and what can be done in the case of persons who die can be done in the case of all owners of capital. No doubt the valuation would take time, but that would not create any material difficulty, as I shall presently show. I should explain that under the Capital Levy Scheme which I have in mind small capitalists, those below £1,000, would be exempt altogether, and also the Levy would fall on *individuals* and not on limited companies. The vast amount of property of one sort or another owned by limited companies of the country would not have to be separately valued at all. Such capital would, of course, be assessed for Capital Levy in the valuation of the shares of the companies. These exceptions would greatly reduce the magnitude of the problem. Valuation for the

Levy would also be simplified by certain regulations which I will briefly describe. These regulations would further insure that the valuation would, on the whole, be more accurate than in the case of the death duties. Speaking generally, the valuation would be made on a conservative basis, and definite guiding principles would be laid down by the Government. An essential feature of the problem would be that every man would be required to make or to have made his own valuation, and he would pay the Levy forthwith on the basis of the valuation which he had returned. But the Government would subsequently go through all the valuations and check them and the amounts paid under the Levy would, where necessary, be adjusted accordingly. If a valuation proved to be too low the balance still due under the Levy would have to be paid up. If, on the other hand, a valuation was too high, the amount overpaid would be returned by the Government. By this method the Levy could be paid quickly, and it would not be a serious matter if the subsequent process of checking the valuations and of adjusting the balances took a considerable time. There would be heavy penalties for deliberate attempts to defraud, and it would be made perfectly clear that these penalties would be enforced by prosecution.[1] In addition, there would be deterrents to make any material under-valuation unprofitable.

To come to closer quarters with the problem of valuation. The greatest difficulty would be with the valuation of real property. I will deal with it presently. It is a minor problem because those who have most of their money in real property are a distinct minority of capitalists. By far the greater proportion of the property to be valued is of such a nature that it could be valued quickly and fairly; the major practical question is the valuation of personal property, and under the organisation of modern business the great mass of capital is held in the form of stocks and shares. To value Stock Exchange securities is a perfectly simple matter. It is done every day, and there is ample professional assistance available. A certain amount of capital, however, is held in the form of securities which are not quoted on the Stock Exchange, but there need be little difficulty in valuing these. Many such securities, although they have not an official quotation, are regularly dealt in on the Stock Exchange, and therefore the valuation would be a simple matter. As regards purely private companies, the directors would be required under regulations to

[1] Every individual would be compelled to swear under affidavit that the valuation he had returned was correct to the best of his knowledge and belief.

fix the price of the shares. Such valuation would be easily made and easily checked, and the plan of requiring directors to fix the price would be an improvement upon the present method of valuing these particular securities for death duties.

The valuation of real property is the most difficult part of the problem. But let it not be forgotten that this matter is already solved, more or less satisfactorily, for the purpose of the pretty heavy Capital Levy known as death duties. What can be done with a man's property when he is dead, can be done when he is alive. It is feared, and one may admit that the fear is not without substance, that real property may be under-valued slightly as compared with personal property. But it should be constantly borne in mind that no practical objection against a Capital Levy is valid if it applies equally to the alternative scheme of a high income-tax. It is an admitted fact that many owners of real property do not pay their proper proportion of income-tax. It is well known that most farmers, agriculturists, and so forth under Schedule B, and also that under Schedule A many owners of real property, escape lightly in the matter of income-tax, and are not paying, and never have paid, their fair amount. It may also be pointed out that many owners of private businesses under Schedule D, and many professional men, escape much more lightly in paying income-tax than shareholders in limited companies. In the case of limited companies and some private businesses, the Commissioners have properly audited accounts to assist them in their work; but it is not so with many other private businesses and individuals. I am afraid that there will always be a big leakage, and, of course, the higher the income-tax the greater will be these inequalities of assessment as between the various classes I have named. It is perhaps one of the arguments for a Capital Levy that it will be less easily evaded than a high income tax. A valuation made once for all, and made, as I have shown, without haste, will be a much more thorough and exact assessment than repeated annual assessments for income tax spread over a very long period of years. Under a Capital Levy there would certainly be a better opportunity of making many owners of real property bear their fair share of the burden.

There is another kind of capitalist who could evade income-tax but who could not evade a Capital Levy. Some persons undoubtedly are investing money in non-income-producing capital. They are doing this deliberately in order to avoid paying income-tax, and they are looking for their remuneration, which they will most probably get, to appreciation in capital value. Under a Capital

Levy these persons will not escape. Under the alternative scheme of a high income-tax they will escape, and that will be a gross injustice.

It is once more submitted that the whole problem of valuation must be looked at broadly and reasonably. As I have already said, it is not possible under any scheme of taxation to get perfect equality and exactitude. But in my view there will be a nearer approximation to equity under a Capital Levy than under a high income-tax.

Another important consideration which should never be overlooked is that the huge War Debt and how it should be dealt with is a war problem. It is a legacy of the war, and there is no simple and painless way of dealing with any of the problems of the war. And surely a proper perspective in all these matters ought to be maintained. It is perhaps going a little beyond my text, but it seems not unreasonable to recall what has happened as a result of the Military Service Acts. Many men have lost their lives, or their limbs, or have been maimed for life; the vast majority of those conscripted have lost their work, and not a few have had their businesses closed down and have lost their capital without receiving a penny piece of compensation. On the other hand, other men of military age who, for one reason or another, are exempt, and large numbers of men over military age, have done extremely well out of the war. Consider also the hardships caused by certain decisions of some of the medical boards. These boards have given what may be termed a Government valuation of life, and life is much more important than property. In saying these things, however, I do not for a moment admit that there is any more difficulty in carrying out the Capital Levy scheme fairly than there is in equitably levying a high income-tax.

The conclusion of the whole matter is that the valuation can be made, and ought to be made, and on balance the incidence of a Capital Levy will be quite as fair as—and, indeed, in my opinion, fairer than—the incidence of a high income-tax.

SYDNEY ARNOLD

A TAX ON CAPITAL AND REDEMPTION OF DEBT.

THE question of the so-called "conscription" of capital has of late acquired considerable prominence. This is due in the main to the enormous growth of the war debt, the certain prospect of heavy financial burdens after the war, the importance of minimising the pressure of taxation on industry in view of post-war competition, and the desirability of reducing as far as practicable the national liability. Added interest has been given to the question by the general demand of "Labour" that some such step should be taken, by the attitude of our responsible financial statesmen, and by the pronounced hostility of certain leading bankers and others.

There is a certain epigrammatic quality in the word which seizes the imagination. It attracts some just as it repels others by the prejudices and antagonisms which it awakens; and, in so far as it stirs feeling, it blinds judgment and renders impossible any impartial consideration of the real question with which we have to deal.

The expression levy on capital is less objectionable, in that it suggests an exceptional operation for a specific purpose. It is best, however, to avoid a new term, having regard to its necessarily vague connotations, and to adhere to the well-understood word "taxation."

Taxation of capital is analogous to taxation of income. They are merely alternative methods of measuring the amount of taxation to be borne by the individual taxpayer. The capital tax is in its essentials not more iniquitous than the other; and it might easily be free from the anomalies which attach to our present "income" tax system. Rhetorical objections are worthless in either case. In both, legitimate criticism falls under the three heads: (1) The equity of the proposal; (2) its economic effects; (3) the practical difficulties of its administration.

So far as concerns the abstract justice of a "tax on capital," little has been said by those who oppose the measure; and, indeed, it is difficult to conceive any argument under that head.

As between a tax on the income arising from capital and a tax on the capital itself, the issue is simple enough. The principle of equality of sacrifice is more truly met by the latter than by the former. Indeed, the growing demand for the remodelling of the income tax is mainly due to the inequalities and anomalies incident to the existing tax. An illustration will make the point clear.

A has £10,000 in cash, which he keeps at home and lives on. He pays no income-tax; and if the sum is exhausted before his death he pays no other tax thereon.

B has shares which are at the moment paying no dividends, but which are *worth* £10,000. He pays no income tax; and if, as is possible, "income" takes the form of an appreciation in the value of the shares, he pays nothing on that.

C has £10,000 on deposit at 2 per cent. His capital is secure, and he pays income tax on £200.

D has £10,000 in his business and makes £1,000 a year. He pays income tax on the £1,000.

E has £10,000, and purchases an annuity of £700. He pays income tax on the £700, although when the annuity ceases his capital is gone. That is, he pays tax on the real income, and a capital tax amounting in the period to 100 per cent. in addition.

F has £10,000, and purchases therewith the lease of a mine. It lasts for ten years, and he makes £1,000 a year. In ten years he pays income-tax on £10,000, but his capital has gone and his real income (*i.e.*, increase in assets) is nil.

These examples might be multiplied indefinitely. They show that an income tax alone (in its present form) leads to anomalies which cannot be defended. Any attempt to remedy this inequality would seem to involve (1) the assumption of a uniform rate of interest (say 5 per cent.) on the current value of the capital, and (2) the separate treatment of so much of the income as can be regarded as the reward of personal exertions, etc. As regards No. (1), it is immaterial whether the tax is so much in the £ on the assumed interest, or so much in the £ on the corresponding capital. We may therefore say that even in normal times and as regards current national expenditure, what is *in effect* a tax on capital (*i.e.*, *measured by capital*) must be introduced to redress the inequalities of the income tax. The point is not without importance when the income-tax rate is low. The unqualified income tax becomes quite indefensible when the rate of tax is high.

Few, probably, will deny that there is no inherent injustice

in a tax on capital in view of the system of death duties which has for so long existed in this country. There is much to be said from the point of view of practical convenience in exacting the "capital levy" at the time the capital is changing hands; but, apart from this, it would be difficult to suggest any form of capital tax more uncertain, more unequal, and more liable to evasion by extravagant living, gifts *inter vivos*, etc., than the death duty. Moreover, as in the case of an individual or a company, so also in the case of the State, expenditure may be divided into revenue expenditure and capital expenditure. The former is an outlay for the current purposes of the year, whose effects are exhausted in the year. The latter is an outlay whose objects and effects are not so restricted. So far as the community is concerned, its strictly current or revenue expenditure might properly be met by an annual tax on the revenues of the community, whatever shape that tax on revenue might take. On the other hand, abnormal expenditure whose purpose or necessity is more nearly related to the permanent interests of the community falls rather under the head of capital expenditure, to be met out of the capital resources of the State.

The present war expenditure may be said to be (1) for the benefit of the existing citizens of the State in so far as its purpose is to defend or improve their personal well-being; (2) for the benefit of future citizens in so far as its purpose is to preserve or secure for them a state of well-being which otherwise they would not enjoy; (3) for the benefit of the existing realised wealth of the community in so far as its purpose is to protect that wealth and safeguard it from seizure or destruction by the enemy.

No. (1) and No. (2) suggest that a portion of the war cost should be spread over (say) three generations; no expenditure of any kind can with any certainty be said to leave a residuum of value to later posterity. That is to say, the normal system of taxation should provide the annual charges and a sinking fund for a certain proportion of the debt. No. (3) implies that the remainder of the war cost should be met out of the current realised wealth of the State—*i.e.*, by some form of tax on capital.

In view of these considerations, it may reasonably be claimed that no case can be made out against a tax on capital *as such* on grounds of justice.

The main objections urged against the taxation of capital for the purpose of redeeming war debt are economic in character;

and it may be admitted that if those objections cannot be refuted, if it is essential in the industrial interests of the country that no "levy" shall be made on capital, then any inequality or injustice incident to a continuing high income tax must be borne with what patience we can muster.

The capital tax has been very generally denounced *ex cathedra* by leading bankers and other financial magnates, and their statements are entitled to respect. It would, however, be more illuminating and instructive if they offered a detailed explanation of the grounds on which the adverse judgment is based. I am disposed myself to say that not only is this special capital levy not injurious to industry, but that it is essential to our industrial well-being.

It is said that after the war we shall need all the capital we can get to hold our own in the economic struggle that must follow peace, and that to diminish our store of capital at so critical a time is "suicidal." That statement will command general assent. But in what way does it touch the present problem? The objection might be urged with much truth against any proposal to spend vast sums in *unproductive* reforms at this juncture. Such measures would undoubtedly absorb both capital and labour urgently needed in the industrial field We are, however, not now concerned with the unproductive expenditure of capital. A special tax on capital for the purpose of paying off war debt will not diminish the available industrial capital in the country by a penny (except so far as such debt is held abroad; and nothing we can do can prevent foreign holders of the debt selling their holdings here after the war).

The special capital tax will at the most effect some redistribution of the available industrial capital, and might in the most favourable circumstances leave such capital quite undisturbed. For example, A has £10,000 cash; B, £5,000 cash and £5,000 war loan; C, £10,000 war loan. A ten per cent. tax is levied *to pay off debt*. In the result A has £9,000 cash; B, £5,000 cash and £4,000 war loan; C, £1,000 cash and £8,000 war loan. Capital available for industry is £15,000 as before, and the annual charge for interest is reduced from £750 to £600. The capital fund of the country is in no way diminished; and industry *as a whole* stands to gain, inasmuch as the burdens on it are lessened.

The financial position of limited companies will, if anything, be improved. Assuming that the capital tax is charged on the individual in accordance with his total wealth, the tax draws

nothing at all from the limited company, and its outlay in respect of income-tax (not necessarily all recovered from its shareholders) is diminished. Moreover, those individuals whose war debt is redeemed in cash are more likely to invest such cash in limited companies than to use it themselves.

As between various classes of wealth, a capital tax is more favourable to the industrial capitalist than an income tax, inasmuch as his income is relatively higher than that of the others.

The direct effect of the capital tax on a small industrialist may be shown thus :—

Capital, £10,000. Tax at 10 per cent. on excess over £2,000 = £800. Tax spread over ten years. Yearly payment, £80. If his income is £1,500, £80 represents about 1*s*. in the £.

On the other hand, a graduated capital tax under which £10,000 paid at the rate of 10 per cent. might well produce £2,500,000,000. If not redeemed by a capital tax, this represents about £150,000,000 a year in interest and sinking fund, extending far beyond the ten years. To raise this our capitalist would have to pay at least 3*s*. in the £ in income tax, or about £225. Even allowing an extravagant modification of these figures, it seems clear enough that the small industrial capitalist stands to gain substantially by a special capital tax.

Suppose the capital £50,000 and the levy 20 per cent. The tax is then £1,000 a year for ten years. If the £50,000 produces a profit of £7,500, the income tax and super tax would amount to (say) 8*s*. in the £, or about £3,000 a year.

Where the graduations of the capital tax and the income tax proceed on broadly similar lines, the charge on the industrial capitalist is diminished approximately in the same proportion as his rate of profit exceeds the normal rate of interest on investments.

Objection is sometimes made to a capital tax on the ground that it is a "tax on capital," as though that mere fact gave to the tax some peculiarly noxious quality. There is no fundamental distinction between a capital tax and an income tax on which such objection could be grounded, so far, at any rate, as our present proposal is concerned. Some form of capital tax may be necessary to balance the anomalies of the income tax. Apart from this, the difference is largely one of degree. Each is a tax on the individual, measured in the one case by the wealth he possesses, and in the other by the income he receives. Provided the tax is moderate, it will in either case be paid out of

income; and so long as this is the case, one is as harmful or harmless as the other.

Little attention need be given to the complaint that any tax on capital must be the thin end of the wedge which extremists or needy Chancellors will be tempted to drive home to the head. "When once an easy way of getting hold of a big sum of realised wealth is discovered, Socialism will not be content with one bite, but will want a second and a third bite later on, until there is nothing more to get." (*Daily Telegraph*, January 31st, 1918.) The same objection has been urged to the income tax, and still more to the super tax. The very facility with which revenue is extracted is made an objection. Every form of taxation is open to abuse. Security can only be found in the common sense, in the educated intelligence of the people, and in the promotion of harmonious relations between the various classes in the State.

The word "repudiation" with consequent destruction of the national credit is also brought into the discussion. The implied suggestion is quite groundless. Sooner or later the debt will be redeemed, and the necessary fund will be drawn, in part, either from the capital or from the income of the debt-holder. Provided the treatment of the debt-holder, either as an owner of wealth or a receiver of income, is identical with that of his fellow-citizens, there can be no question of repudiation. Only in the case of foreign holders of the debt is any such question possible. If the capital tax were applied to them as holding investments or property in this country, a real repudiation would take place. There is, however, no shadow of a hint of such a course. Such a holding represents a debt from this country to one outside its jurisdiction, and is no more "property" *in* this country than is an ordinary trade debt from the citizen of one State to the citizen of another. A capital tax should clearly not apply to British national stock held abroad.

There is the minor point that the prospect of such a tax must tend to prevent investment in war bonds. There is possibly some truth in that, although not much. It could be countered by the very fair proposal that, for the purposes of such taxation, war stock should be valued at 5 per cent. below its market value. This would give a comparative advantage to those who had come forward to help the State in the war; and to such a concession [illegible]

[illegible] all this, however, note must be taken of the general [illegible] effect of an enormous National Debt. Probably

nobody will deny that an unproductive debt of £7,000,000,000 is an evil which ought to be reduced at the earliest possible moment. Writing of the diverse effects of taxation and loans, J. S. Mill stated: "A Government which borrows does actually take the amount within the year, and that, too, by a tax exclusively on the labouring class." This statement is qualified by the fact that much of the loan goes back to the workers in the form of wages; but there is no avoiding the truth that the withdrawing of enormous sums from a fund which would otherwise have gone into productive industry and the spending of such sums in unproductive ways does react seriously upon the labouring class. The money is already borrowed; but the argument applies with at least equal force to the raising of the money wherewith to pay the yearly interest on such debt. He proceeds: "Is it expedient to take steps for redeeming the debt? In principle it is impossible not to maintain the affirmative. . . . Two modes have been contemplated of paying off a National Debt, either at once by a general contribution, or gradually by a surplus revenue. The first would be incomparably the best if it were practicable; and it would be practicable if it could justly be done by assessment on property alone." So far his opinion in favour of a special tax on capital for the purpose of paying off debt is clear and definite enough. The principle is economically sound. He objects to it in practice on grounds of equity. "Whatever is the fitting contribution from property to the general [*i.e.*, annual] expenses of the State, in the same and in no greater proportion should it contribute towards either the interest or the repayment of the National Debt." The State may realise any property it possesses to pay off debt, but, "beyond this, the only mode which is both just and feasible of extinguishing or reducing a National Debt is by means of surplus revenue."

One need not quarrel with this as a general principle where a small debt is concerned, although, since Mill wrote, a more or less arbitrary differentiation for taxation purposes has been introduced between unearned incomes (property) and earned income (labour).

Many, however, will decline altogether to accept his qualification in the case of our colossal war debt. The supreme needs of the State, jeopardised by the war, have compelled widespread inequality of sacrifice, and have swept away many of the principles which have guided the State in its treatment of different classes and the mutual relations of these; and if the supreme needs of the State so require, special taxation of wealth must be ad-

mitted. After all, as is shown above, the special capital tax interpreted in terms of an income tax tends to equalise the burden as between different classes of wealth, and at the same time increases for ten years the differentiation of rate between incomes from property and incomes from earnings.

In dealing with the economic side of the question, we should not forget the value of such a measure on the general attitude of labour and capital. Apart from its intrinsic merits, a capital tax under the special circumstances of the moment, offered by the wealth-owning class and not extorted by pressure, could hardly fail to have a very beneficial effect on the relations between the various sections of the community during an exceptionally trying period, when the nature of those relations may become a matter of grave importance.

In estimating the financial result of any specific tax on capital it is necessary to remember that while the National Debt forms no part of the total wealth of the State, it does form part of the aggregate taxable capacity of the individual citizens, except so far as it is the result of the investment of borrowed money. Of a possible post-war debt of £7,000,000,000, probably £5,000,000,000 would fall as taxable wealth within the limits of the suggested tax.

It should be further noted that the removal by means of a tax by a percentage of the individual's wealth would lessen the future State revenue as regards death duties and income tax. Against this reduction we may set the probable substantial yield of these duties in view of the more progressive industrial life of the country and the more intense development of the resources of the Empire.

The problem of the war debt thus divides itself into two parts: the special redemption by a capital tax, and the normal redemption out of the future surplus revenues of the State.

As regards the former, it is suggested that the object aimed at should be the redemption of £3,000,000,000. If the contributions are spread over ten years the actual assessment would amount to £4,000,000,000 to cover interest, the *real* burden on the taxpayer being represented by the lower figure. The degree of graduation and the limits of exemption could only be determined after a careful estimate of the number and amounts of the fortunes of the wealth-owning citizens.

The remaining sum of £4,000,000,000 thus falls to be dealt with out of the normal revenue. It is desirable that definite unchangeable provision should be made for its full redemption

within a relatively short period. If this is fixed at sixty years, the average rate of interest payable may be put at 4½ per cent. over the whole period, allowing for conversions which must be made from time to time. Interest and sinking fund thus amount to about £160,000,000 per annum over the whole period. We may therefore be content to pay interest only, without providing for sinking fund, for (say) twenty years, when a partial conversion may be possible; and after that time apply to redemption purposes all annual saving resulting from conversion to a lower rate of interest. The amount to be provided by general taxation for the present is thus £200,000,000, as compared with at least £400,000,000 (interest and sinking fund) if no special redemption is effected. The economic advantages of such a reduction in annual taxation are obvious.

The practicability of levying such a capital tax is the third element in the discussion. It would be out of place here to set out any detailed proposal. It must suffice to state that the problem of assessing and collecting such a tax presents no overwhelming difficulties. It is mainly one of business organisation, adequate powers, and common sense. The special objections to an annual tax on capital based on the extreme difficulty of doing the work of assessing with any reasonable completeness in so short a period, and of realising any assets taken over in place of cash in the course of collection, are not now to be met. The long period available for the work and the wide diffusion of the debt to be redeemed could not fail to reduce these practical difficulties to entirely manageable proportions.

A. Hook

THE DOCTRINE OF INDEX-NUMBERS ACCORDING TO PROFESSOR WESLEY MITCHELL

THE problem of which the object is to measure changes in the value of money has long exercised economists and statisticians. Thirty years have elapsed since the British Association appointed a committee for the purpose of investigating the best methods of ascertaining and measuring variations in the value of the monetary standard. The wording of this instruction may serve to remind us of the tremendous magnitude which the phenomenon to be measured has since the outbreak of the war assumed. No one would now set out to ascertain the fact of a change in the value of money—a fact which in the peaceful 'eighties of last century could be disputed by sturdy mono-metallists without obvious absurdity. But though the fact now stares us in the face, the measurement of its magnitude is still important; perhaps more important than ever. For it can hardly be doubted that as the war goes on, and during the period of so-called "reconstruction," there will be required careful measurements of change in the purchasing power of money, with a view to the adjustment of wages and of other payments. And not only for practical purposes, but also in the interest of monetary theory, will such measurement be urgently required. In the controversies which will probably flourish in the early part of the twentieth, as in that of the nineteenth, century concerning the management of the currency during a great war, reference will certainly often be made to the index-numbers which represent the change from time to time in the level of general prices. If, as may be expected, the quantity theory of money is appealed to, it will be proper to construct another kind of index-number showing changes in the volume of trade. And other index-numbers there are which may be required in the course of reconstruction; in particular, those which measure wages nominal and real.

Coincidently with the increased demand for the use of index-numbers it is opportune that there has appeared a singularly com-

prehensive and lucid treatise on this species of measurement.[1] It is true that Professor Wesley Mitchell's monograph on index-numbers of wholesale prices does not cover all the ground which we have here in view. But the methods appropriate to the general problem can mostly be learnt from his discussion of a particular but leading case. That discussion is so complete and thorough that it almost dispenses the student who is not a specialist from the trouble of consulting the earlier literature of the subject. Within a limited but considerable and representative province Professor Mitchell has explored every inch of the ground. He has traced the many-branching paths which perplexed most of his predecessors. He has added clear directions showing where each of the paths leads.

The last-mentioned task is more difficult and important than may be supposed. It is a peculiarity of the problem that much thought must be expended in order to find the meaning of the question before you begin to answer the question. The practical man intent upon making or spending money does not suspect the ambiguity lurking under inquiries about its value. He asks what is the equivalent in our currency of the guinea in Charles II.'s time, and expects an answer as pat as if he had asked what is now the bank rate, or what the price of wheat. It is true that where the distance between the epochs compared is not so enormous, in the more usual comparisons of price-levels, the definition of the question is not so important; much the same answer may be given to different varieties of the question. The relation is like that between ethical theory and good conduct; if Bishop Butler and other moralists are right in thinking that much the same conduct may follow from first principles so opposite as rational benevolence and rational self-love. When this analogy was suggested to Sidgwick, on the occasion of a meeting of the above-mentioned British Association Committee, the author of the *Methods of Ethics* made reply to the effect that, while frequently different methods might be adopted without obvious difference in practice, yet occasionally at critical turning-points the difference between opposite first principles would make itself felt decisively. We surmise that in like manner monetary distinctions which are otiose in ordinary times may have become significant under present conditions. All the greater is the debt of the economist to Professor Mitchell for having made the distinctions clear. Consider, for instance, Professor Irving

[1] Index-numbers of wholesale prices in the United States and foreign countries (*Bulletin of the United States Bureau of Labour Statistics*, 1915; whole number 173).

Fisher's index-number in which each article is weighted in proportion to the number of times it is sold; quite properly, as Professor Mitchell points out (78),[1] with reference to Professor Fisher's purpose. In ordinary times there would probably be little difference between this number and that which is obtained by using the same commodities in the same quantities without taking account of the number of turnovers (Mitchell, *loc. cit.*).[2] But in war time, methods of business being considerably altered, it is possible that the distinction corresponds to a real difference.[3] The same may be said about another variety which Professor Mitchell thus distinguishes. "If the aim be merely to find the differences of price fluctuation characteristic of dissimilar groups of commodities, or to study the influence of gold productions, or the issue of irredeemable paper money upon the way in which prices change, it may be appropriate to give identical weights to all the commodities" (78).[4] Again, the consumption standard, as based on family budgets, or more generally on the expenditure of the citizens in the way of consumption for the sake of personal or sympathetic satisfaction, exclusive of their collective expenditure on munitions for the satisfaction of patriotic motives, may well differ in war time from an index-number like that of Professor Irving Fisher, if there is included in the work which the currency has to do the payments by the Government for munitions. Conceivably, however differently from present experience, the *momentum* (price × velocity) of currency in relation to the

[1] The numerals in brackets refer to pages in Prof. Mitchell's treatise.

[2] *Cp. Memorandum British Association Report*, 1889, p. 134, vi. Professor Foxwell's method.

[3] The subtlety of these distinctions deceives even experts. Thus the reviewer in the *Economist* (for January 12th, 1918) criticising a recent publication in which it was held not to be proved, upon the lines of Irving Fisher, that money rather than goods was responsible for the rise of prices, observes triumphantly: "There can be no question that the increase in currency has been very much more rapid than the increase in the production of goods, unless we are to assume that this country, with four or five millions of its best men withdrawn into the Army, has been able to increase its production by more than 50 per cent." But the four or five millions have *not* been withdrawn from the production with which we are concerned in *this* inquiry. They (with their dependants) make *prima facie*, at least as great a pull as before upon the currency. Again the increase of women's and old men's paid work swells the denominator, which Irving Fisher calls "T." But then, asks the reviewer, why have prices risen? Quite possibly, we reply, not so much because the quantity of money has increased out of proportion to the quantity of "goods" (in the sense here relevant), as because the circulation of the goods is less rapid (as suggested in the work criticised, *cf.* Lehfeldt, ECONOMIC JOURNAL, Vol. XXVIII. (1918). p. 111). That is not "inflation" in the sense of causation on the side of money.

[4] *Cp. British Association Memorandum*, 1887, Section viii: "Determination of an Index-number irrespective of the quantities of the commodities."

"volume"—or, rather, the momentum, or *flow*—of goods, including munitions, might remain constant; while the prices of all the goods consumed by the citizen, exclusive of munitions, rose considerably.

Our readers are perhaps beginning to feel that they have had enough of this concept-splitting. Yet there remain certain varieties of index-numbers which we cannot pass over: two mentioned by Professor Mitchell and two which it did not come within his subject, more narrowly defined than ours, to mention. There is first the index-number intended to serve as a business "barometer" (66). "If the aim be to construct a business barometer, the data should be prices from the most representative wholesale markets, the list should be confined to commodities whose prices are most sensitive to changes in business prospects and least liable to change from other causes, and the weights may logically be adjusted to the relative importance of the commodities as objects of investment. Professor Mitchell also directs attention to what he calls a "general-purpose" index-number, not adapted to any special end and in practice applied to very various purposes, of which more than a dozen are enumerated (26).[1] Professor Mitchell is no doubt right in thinking that "the day has not come when the uses of index-numbers are sufficiently differentiated and standardised to secure the regular publication of numerous special-purpose series." Till then "the users of index-numbers must put up with figures imperfectly adapted to their ends" (26).

Another conception of the end, another definition of the value of money, is derived from Ricardo's axiom that "a commodity which at all times requires the same sacrifice of toil and labour to produce it is invariable in value." Professor Marshall has countenanced this view of our problem. In his evidence before the Precious Metals Royal Commission of 1888, speaking of the appreciation of gold,[2] he said: "When it is used as denoting a rise in the real value of gold, I then regard it as measured by the [increase] [3] in the power which gold has of purchasing labour of all kinds—that is, not only manual labour, but the labour of

[1] *Cp. Memorandum*, 1887, p. 44, "mixed modes, compounding the ends or means or several distinct methods" . . . "the most comprehensive . . . purporting to be a compromise between all the modes and purposes—*the* method if practical exigencies impose the condition that we must employ one method, not many methods."

[2] Appendix to Final Report [C 5512] Question 9025. Quoted in the *British Association Memorandum* of 1889, p. 161.

[3] "Diminution" has been substituted for "increase" in the original by an obvious misprint.

business men and all others engaged in industry of any kind." It has been said that changes under this head are sufficiently reckoned with when the changes in average incomes are noted. This, however, may be questioned in time of a war involving enormous changes in the quantity of labour employed in production, additions here and subtractions there.

Nor can we pass over in silence Professor Nicholson's index-number based on capital.[1] It is remarkable that the conception which lies at the root of this method should have been that which, under a different aspect, first presented itself to Professor Lehfeldt in his independent and original investigation of the "absolute price of gold."[2] Professor Lehfeldt's *second* definition, referring to a "redistribution of effort of production" on the supposition of "the total of effort being unchanged," savours rather of the labour standard which we mentioned just now.

When we have decided what is the end at which to aim, we may go on to consider how the data are to be shaped to that end, and what data are to be sought. The step which is last in the analysis, as Aristotle would say, is first in the order of practice. The initial operation of collecting the original quotations of price requires more care and labour than might be supposed. "To judge from the literature about index-numbers, one would think that the difficult and important problems concern weighting and averaging. But those who are practically concerned with the whole process of making an index-number from start to finish rate this office work lightly in comparison with the field work of getting the original data" (27).[3] The fathers of the English Statistical Society were so apprehensive lest the field work of collecting facts expressed in figures should be neglected if attention were diverted to drawing inferences from those facts that they proposed to divide the two kinds of work, and as the motto which they chose purported—*aliis exterendum*, under a wheatsheaf—themselves to gather in the harvest of statistics, while leaving it to others to thrash out the inferences. But Professor Wesley Mitchell has shown that it is possible for

1 Described in the *British Association Memorandum*, 1887, section VI., and criticised with perhaps less than justice in Section X.

2 ECONOMIC JOURNAL (March, 1918, p. 108).

3 One who was associated with Giffen when he was preparing the scheme of an index-number adopted by the British Association Committee can remember how much he was influenced in the selection of the items by the possibility of obtaining an available figure. He has himself expressed this in the second Report of the Committee (1888) which he drew up. "In dealing with the question practically those concerned must always have an eye upon the data, and consider what is practically attainable" (*loc. cit.* p. 183, and context).

one and the same individual—combining official diligence with economic subtleties and statistical refinements—both to collect the raw material of primary data, and also to employ the complicated machinery which is required in order to render that material available for human use. We have not space to describe the excellent directions which are given to "the field worker collecting data for an index-number" (27). Indeed the whole of Part II., nearly two-thirds of the volume, dealing with index-numbers of wholesale prices in the United States and foreign countries, abounds with suggestions which may be useful to the practical statistician. Attention should be called to the suggestion that the facts may prove to be of more permanent interest than the theories which are now built thereon. "It is probable that long after the best index-numbers which we can make to-day have been superseded, the data from which they were compiled will be among the sources from which men will be extracting knowledge which we do not know enough to find" (30). We surmise that some of this future knowledge will be of the kind to which Professor Mitchell points: "to find how prices are interconnected, how and why they change, and what consequences each change entails" (29, 67).

Between the collection of the data and the completion of the index-number there are several intermediate processes which Professor Mitchell describes under the headings *base periods*, *the numbers and kinds of commodities included*, *problems of weighting*, *averages and aggregates*. We adopt this division, but we are not careful to follow the author's order as to the topics which are ranged under these four heads.

Under the first head Professor Mitchell's most important contribution is the support which he gives to the method proposed by Professor Marshall, according to which the *base* adopted each year is constituted by the prices of the preceding year. "Chain" index-numbers it is proposed to call this species (36, 37, referring to 23). The ordinary "fixed base" index-number—for example, one constructed for the year 1913 with the prices of 1890–99 as base—is liable to an imperfection which is thus worded: "As the years pass by the commodities that have a consistent trend gradually climb far above or subside far below their earlier levels, while the other commodities are scattered between these extremes. Thus the percentages of variation for any given year gradually get strung out in a long, thin, and irregular line without any marked degree of concentration about any single point" (23). On the other hand, a careful scrutiny

of the relative prices with which the "chain" method deals brings out the interesting circumstance that these percentages are grouped approximately according to the "normal law" of distribution. The familiar form which has been likened to (the front view of) a *gens d'armes'* hat reappears. But it should be noticed that in the centre of the hat there is a spike like that of a Prussian helmet—a "mode" which is very abnormal.

There is something impressive in the introduction of the normal law—the dominant principle of the higher statistics—into questions relating to money and prices. It is like the appearance of a distinguished savant as witness in a case relating to ordinary business. Let us make certain that the testimony is rightly interpreted.

When it is claimed as a merit of the "chain" data that they conform to the normal law, the question arises what advantage is there such conformity. The feeling of statisticians on this question may perhaps be expressed by the old answer, "Si non rogas, intelligo." To reply that the law is convenient for purposes of calculation seems hardly relevant to the present inquiry. A deeper reason may be found in the presumption that the law is the outcome of numerous independent causes.[1] Since it is unlikely that independent phenomena should vary concurrently, we have here some guarantee of a certain stability in the grouping under consideration. It may be worth suggesting that prices regulated by Government in war time are determined by general rules rather than the plurality of fleeting causes which constitute the condition of the normal distribution. But we are not prepared to affirm that arbitrary governmental regulations will be deficient in the element of haphazard.

However, we do not dispute that it is a merit in a statistical group to conform to the normal law. We admit, too, that a continual elongation in one direction, such as Professor Mitchell has observed in the case of some relative prices, tends to deformation of the law. If *all* the prices behaved in this way, some moving upwards continually, the others downwards, they would

"leave in the midst a horrid vale,"

quite inconsistent with the normal contour. As nothing like this occurs, the continued elongations can be only moderately disfiguring; to what extent must be a matter of observation. We are not satisfied that this observation is performed with sufficient

1 Independence being understood in the sense explained by the present writer. *Journal of the Royal Statistical Society*, 1916, p. 462, and references there given.

care by Professor Mitchell. He shows two diagrams, one representing the distribution of prices in 1813 as compared by the "chain" method with those of 1812, the other the distribution of 1813 compared with 1890–99 by the "fixed-base" method; and points out that the former set obey approximately the normal law. "But," he continues, "the distribution of the second set of variations (percentages of change from the average prices of 1890–99) . . . belongs to a different type. It has no pronounced central tendency; it shows no high degree of concentration around the arithmetic mean or median. It is more like an oblong than like the bell-shaped normal curve . . . its probable variation is five times as great as that of the corresponding variations for 1912 prices." This evidence is not conclusive; for it may be shown that the same appearance would be presented in like circumstances by the most perfectly normal distribution.

To construct an ideal distribution imagine a game in which each player moves a peg one step of, say, a quarter of an inch on a horizontal board either forward or backward, according as a tossed coin shows head or tail. A number of players that move thus east or west start from a line running north and south. Suppose that each player takes several steps in five minutes (corresponding to several changes in the price of an article during a year). At the end of that period the distances from the initial line will be ranged in at least rough correspondence to the normal law. Now let the race be prolonged for more than two hours—twenty-five periods each of five minutes. At the end of this time the normal distribution will be much more perfect (since more independent causes will have operated). But appearances would be against the new group. It might be said of it, as of the "fixed base" series, that "it has no pronounced central tendency; it shows no high degree of concentration around the arithmetic mean," and so forth. For let there be given the "probable deviation" of the grouping after the first five minutes. Say it is so many quarters of an inch, or, better, a percentage of a certain standard length; namely, the number of inches which measures the distance of the initial line—the "carcer" of our imagined race—from a zero-point (west of that line). Let the said probable deviation be 4 (per cent.). Then the probable deviation for the group at the end of the race will be *five* times as great,[1] namely, 20. The latter grouping naturally appears "oblong," as contrasted with the "bell-shaped" contour of the

[1] The *square root* of the number of independent constituents, which we have supposed to be twenty-five.

former. The contrast is exhibited in the accompanying diagram,

16	38	60	60	38	16
14	15	15	15	15	14

where the notches on the line are placed at intervals of 4 (per cent. of the standard length), the probable deviation of the grouping formed by a five minutes' race. The upper figures show roughly (part of) a group of 240 observations thus formed. The lower figures show the grouping that may be with most probability expected after the forces tending to dispersion have acted for twenty-five times five minutes. It will be noticed that the shape of the bell is no longer conspicuous, about the centre at least. Certainly, if we exhibited the whole group, it might come out; it would come out if we represented, not the result of one race, but the average result of indefinitely numerous trials. But at any one race of the kind which we have described the grouping as a whole would assuredly appear rather "oblong." And yet it may be more normal than the small group. If the distance of each player from the starting-point at the end of the long race is divided by 5, the group so formed may be expected to comply with the ideal shape better than the set of points reached in the short race.

This contrast is not materially affected by the introduction of certain concrete circumstances. The coins which are used might be slightly unsymmetrical. There would then result a grouping which has many properties in common with the normal shape, the sub-normal curve as it has been called.[1] The sub-normal shape would persist, in spite of several modifications assimilating the case to that of price-variations. Then the causes tending to variation need not be perfectly independent. The steps need not be equal. There need not be several changes in each of the short periods. A variation may persist in one direction for several periods, provided that there is a chance of its being reversed. If, indeed, the last-named condition is removed on a large scale, the sub-normal character must disappear. Whether this or other abnormalities occur on such a scale as to vitiate the result is not to be decided off-hand, but by a careful scrutiny of the given statistics.

We have performed this scrutiny with respect to a set of 145 commodities selected by Professor Mitchell from the 241

[1] See *Journal of the Royal Statistical Society*, "Mathematical Representation of Statistics," Sect. III., 1917, p. 65 *et passim*.

above mentioned. We have examined the percentages presented by comparing the prices of 1913 with those of 1912 according to the "chain" method, and the percentages for 1913 according to the "fixed base" method with base 1890–99; and we are satisfied that the latter conform to the normal law at least as well as the former.[1]

But while thus questioning one of Professor Mitchell's premisses, we do not dispute his conclusion: "The longer a fixed-base system is maintained the more scattered become the relative prices as a rule" (37). Our discussion, however, warns us to accept with caution the corollary attached to this conclusion. "With a given body of quotations to build upon, chain relatives are more trustworthy than their rivals" (*loc. cit.*). Chain relatives relating to the preceding year are no doubt more trustworthy than their rivals when related to a much earlier period. But so are fixed-base index-numbers more trustworthy than a chain system if the former relate to the preceding year, the latter to a much earlier period.

The latter relation is dismissed too hastily in our judgment by Professor Mitchell. "Chain relatives for successive years . . . multiplied together to form a continuous series" (38) surely bring the later years into a relation with the earlier, which is as valid as most of the conceptions involved in an index-number.[2] We have performed this operation with respect to the chain index given by Professor Mitchell extending from 1890 to 1913; and have compared the result for 1913 with that which is given by the fixed-base method with base 1890-99. The difference appears at first sight marked; the median and the arithmetic mean according to the chain system being (for 1913) respectively 111·5 and 113, while, according to the fixed-base system, they are about 126 and 130 respectively. But it must be remembered that the chain starts from a greater height than the base of the fixed system; the level of 1890 (the base of the chain) being, with respect to the base of the fixed system, 113 or 114. This being taken into account, the consilience between the two systems is remarkable; and, indeed, greater than was to be expected.

It is tenable, we submit, that for certain purposes the chain system gives just as good a measure of the change in the price-

1 The probable error for the group formed by comparison with a distant period, viz., nearly 20, is to the probable error for the group formed by comparison between two consecutive years approximately in the ratio supposed in our illustration.

2 *Cp. British Association Memorandum,* 1887, p. 17.

level as the fixed-base system. For this reason we agree with Professor Mitchell that "it is an excellent plan to make from the original quotations two series of index-numbers—one a chain index and the other a fixed-base series."

Under the head of "Numbers and Kinds of Commodities Included" Professor Mitchell adduces a discovery for which students of his *Gold Prices under the Green-back Standard* [reviewed in the ECONOMIC JOURNAL, Vol. XVIII. (1908), p. 581] will be prepared. He has observed that the fluctuation in price from year to year is much greater for some kinds of commodities than for others (52 *et seq.*). Thus manufactured goods are steadier than raw materials. There are characteristic differences among the price fluctuations of the groups consisting of mineral products, forest products, animal products, and farm crops. Again, consumers' goods are steadier in price than producers' goods, the demand for the former being less influenced by vicissitudes in business conditions. Knowledge of this kind may be used to explain the discrepancies between different index-numbers which mix these classes of commodities in different proportions. Professor Mitchell bases on this observation a recommendation that the commodities utilised in the construction of index-numbers should be classified, not (or not only), as now, empirically, or with reference to practical interests, but (also) "upon causal lines, upon differences among the factors which determine prices, upon a principle of division which throws more light upon the workings of the complex system of prices."

In considering that system Professor Mitchell has thrown light upon the complex systems. For in the course of his observation he brings into view the interdependence or *correlation* between the prices of different commodities. There is a similarity between the price fluctuation of finished products and raw materials. This, however, is less than the similarity between the price fluctuations of finished products made from different materials.[1] The latter similarities, we surmise, are due to common causes, such as business cycles or changes in wages. The alternations of prosperity and depression no doubt affect all, or at least very many prices; but some much more than others. Thus the prices of minerals fluctuate with the alternations of business cycles better than the prices of other raw materials—farm and

[1] The fact is thus happily expressed by our author: "As babies from different families are more like one another than they are like their respective parents, so here the relative prices of cotton textiles, woollen textiles, steel tools, bread, and shoes differ far less among themselves than they differ severally from the relative prices of raw cotton, raw wool, pig-iron, wheat, and hides."

forest or animal products. Throughout the system there are found to be subtle correlations between observations which *primâ facie* are apt to be regarded as independent.

There is here exposed a feature which no doubt would be presented by other groups of statistics could they be as carefully examined. Observations seemingly independent are in reality honey-combed with correlations. Accordingly, calculations of probabilities based on the assumption of independence are apt to be inaccurate. Mathematical statisticians are too fond of calculating the "probable error" of averages on this assumption. They evolve, often with much labour and skill, a formula involving n, the number of observations, usually in the form of the *square root* of n as a factor of the denominator. They forget that commonly the given number n exaggerates the independence of the observations; owing to the existence of correlations, such as in the case of prices Professor Mitchell has so well expressed.[1]

Under the head "Problems of Weighting," Professor Mitchell propounds three questions: "Should the weights be sums of money or physical quantities? Should the weights be changed from year to year, or should they be kept constant? Should the weights be adjusted to the importance of the commodities as such, or should there be taken into account also the importance of the commodities as representing certain types of price fluctuations?" (78).

As to the first question, physical quantities measured by some conventional standard as a ton or a gallon are evidently improper weights for relative prices, ratios of which the type is p_r, the price of an article in the rth year, divided by p_o the price of the same article in the base year (or period). But the *value* of the article (at the base, or some other suitable time) may properly be taken as the weight.[2]

As to the change of weights in view of change in the relative importance of commodities, Professor Mitchell points out that the compiler must choose between two evils, inaccurate weights and ambiguous price measures (79, referring to 31). With refer-

1 The great Laplace was not free from this assumption when he proposed to calculate the population of a country from the ratio between the number of baptisms and the population in different districts; and estimated the probable error of the calculation without taking into account the difference which no doubt prevails in respect of vital statistics between the inhabitants of different districts [*cf. Journal of the Royal Statistical Society*, Vol. LXXX. (1917), p. 549]. Probably only random samples such as those on which Dr. Bowley operates are quite —or at least very nearly—free from the influence in question (see Bowley, Presidential Address to Section F of the British Association, 1906; and *Livelihood and Poverty*, 1915.

2 *Cp.* below, p. 188.

ence to fixed-base index-numbers, he considers that "the least objectionable compromise is probably to revise the scheme of weights, say, once a decade, and to show the effect of this change by computing overlapping results for a few years with both the old and new weights."[1] He puts "chain index-numbers" in a different category, for a reason that we have above questioned,[2] "since such series do not profess to yield accurate comparisons except between successive years" (80).[3]

Nor are we disposed to accept without qualification his answer to the third question, which is based on the following axiom. "An accurate measure of change in the level of all wholesale prices is not obtained unless all of the different types of fluctuation [referred to above, p. 186.] . . . are represented in accordance with the relative importance of the commodities belonging to each." Very deep questions of first principle are here involved. We submit that the concept of an index-number for prices lies somewhere between two extreme definitions. One is the money value of a perfectly definite set of articles; for instance, a provision for certain functionaries of so much bread, sugar, uniforms, etc., from year to year (or at the same time in different countries). The sum total thus presented hardly deserves to be called an *index-number* (a title which, we observe with satisfaction, Professor Mitchell does not bestow as lavishly as some writers have done). Contrasted with a compilation which is of the nature of a commercial account is a true index-number, as described by Dr. Bowley: a quantity which we cannot observe directly, but which influences others which we can so observe.[4] The *quæsitum* thus conceived is related to the given price variations much as a physical quantity under measurement is related to a set of observations each purporting to represent the sought quantity. But the theory of errors-of-observation shows that in the combination of the given observations "less weight should be attached to observations belonging to a class which are subject to a wider deviation from the mean. Such would be prices of articles which, exclusive of the common price movement of all the selected articles, are liable to peculiarly large *proper* fluctuations."[5]

[1] In illustration of this practice Professor Mitchell refers to Knibbs' *Cost of Living in Australia*, Commonwealth . . . Bureau . . . of Statistics Report, No. I., pp. xxiv, xlix.

[2] Above, p. 185.

[3] See reference given in note to p. 185.

[4] *Elements of Statistics*, Chap. IX.

[5] *British Association Memorandum*, 1887, p. 36. *Cp. Memorandum*, 1889, p. 157: "If more weight attaches to a change of price in one article rather than another it is not on account of the importance of that article to the consumer or the shopkeeper, but on account of its importance to the calculators of probabilities as affording an observation which is peculiarly likely to be correct."

Ordinarily the required index-number is intermediate between the two extreme types which we have indicated. For even where the form is *primâ facie* a weighted sum—an aggregate of products each formed by multiplying a price by a quantity—still in our ignorance of the true factors the compound may assume the character of a true index-number.[1] Accordingly, a distribution of weight different from that which Professor Mitchell appears to prescribe would be ideally advisable. But where both the end to which our problem is directed and the means conducing thereto are so obscure and uncertain, we may acquiesce in our author's comment: "Perhaps it is a counsel of perfection to urge such requirements in systems of weighting."

It remains to consider the questions raised under the head "Averages and Aggregates." To some extent the answer to the questions under this and the preceding head will have been anticipated by the earlier discussion. For some decisions as to the scope and purpose of the index-number involve the choice of the method. Thus, if the purpose is that of Professor Irving Fisher, it follows at once that the proper combination of the data is the sum of the *values* (quantity × price) of the different commodities, each value weighted by the "turnover" of the commodity. The form of the index-number which purports to measure change in the cost of living is likewise predetermined. Ideally, at least, the form of a weighted sum is prescribed, though in practice it might be necessary to substitute some other.[2] The choice of average is wider in the case of other objects, of which some have been above mentioned.[3]

Professor Mitchell compares very fairly and fully the several available averages. Three stand out as selected candidates: the geometric mean, the median, and the arithmetic mean. With regard to the geometric mean, Professor Mitchell points out—in addition to other considerations in favour of this form—that it is dictated upon a certain conception of the purpose in view. "If that purpose be to measure the *average ratio of change* in prices, the geometric mean is the best; indeed, in strictness, it is the only proper average to employ."[4] But, continues our author, "as a rule our interest does centre in the money cost of goods rather than in the average ratio of changes in price."

[1] On this and other points connected with this discussion it may be allowable to refer to the present writer's *Lecture on Currency and Finance in Time of War* (Clarendon Press), 1917.

[2] Above, par. 1.

[3] Above, p. 178 *et seq.*

[4] Jevons probably meant something like this by his somewhat obscure dicta as to the grounds for preferring the geometric mean. *Investigations*, pp. 23, 121.

If the geometric mean is ruled out, it remains to weigh the rival claims of the median and the arithmetic mean. Professor Mitchell strikes the balance more impartially than the majority of practical statisticians. Still, we think that even he has not done full justice to the median. Its defects in respect of convenience and accuracy appear slightly exaggerated in his presentation.

An objection of the first kind is thus stated: "Medians of different groups cannot be combined, averaged, or otherwise manipulated with ease as can arithmetic means." For instance, the Bureau of Labour Statistics, after obtaining the sums of relative prices for farm products, clothing, etc., can obtain by simply summing up these sums the grand average for all commodities. But "it could not handle medians in this convenient fashion; instead of combining the sums from the groups, it would have to combine the single commodities." This objection is true and serious. But it is not in practice quite so serious as it seems in statement. In order to obtain the median of a composite group, one compounded of two groups for each of which the median has been found, it is not in general necessary to "combine the single commodities" in the sense of re-examining them all. It suffices to re-examine and rearrange those which are in the neighbourhood of the respective centres.

For example, here are two groups each consisting of *twenty-seven* observations ranged in the order of magnitude, which observations have each been obtained by adding together ten digits taken at random from mathematical tables.[1]

A.	27	30	31	32	33	34	36	37	40	41	*42*	46	47	48	49	50	51	52	59	64
		30								41	42	46						52		
		30																		

B.	29	31	32	33	34	36	38	39	41	43	*44*	45	46	49	50	52	53	56	57	59	62
							38					45	46								
							38					45									
							38														

The median, being the *fourteenth* observation in the order of magnitude, is, for Group A, 42, and for Group B, 44. To find the median for the group compounded of these two we need not re-examine all the observations. For it is evident that the median of the compound cannot be greater than the larger of the two medians, viz., 44; nor less than the smaller, viz., 42. Accord-

[1] These figures are adduced with some comments relative to the present subject in the *British Association Memorandum* for 1889, p. 59. In the third group there given one of the sums, above 50, has been omitted by a misprint

ingly, we may thus summarily, for the purpose in hand, re-write the data.

A	XIII	42 42	XII
B	XII	43	XIV

Here the Roman numerals denote the number of observations which occur respectively above or below those given in Arabic figures. As the median of the composite group comprising *fifty-four* observations is intermediate between the twenty-seventh and twenty-eighth observations, it is evident at a glance that the required median is intermediate between 43 and 42, say 42·5. The process is easily extended to three or more groups.

However, we do not deny that the arithmetic mean has a considerable advantage over the median in virtue of the proposition, true of the former but not of the latter, that the mean of two (or more) means is the mean of the group formed by the constituents of both (or all) the several means.

Our difference with Professor Mitchell on another ground is more serious. He finds a difficulty in the use of the median in two opposite cases : when the given observations are either closely crowded, or widely dispersed about the centre of the group. As to the first case, it is said that the median may not answer precisely to its definition when several of the items to be averaged have identical values. For example, in Table II. [tabulating deviations presented by "chain" index-numbers] it often happens that the median falls on a large group of precisely identical figures, so that it ceases to be true that half of the cases are above and half below the median. Upon this it may be sufficient to say for the present[1] that the case in which there is an abnormal agglomeration about the centre is *primâ facie* one particularly favourable for the use of the median; since its probable error is less the greater *ceteris paribus* the height of the frequency curve at the middle.[2]

The opposite case of observations widely dispersed in the neighbourhood of the centre would be open to objection if the cause of the phenomenon were a depression in the form of the grouping, if the shape of the frequency curve about the centre resemble a valley between two eminences.[3] In that case, for the reason just now given, the probable error incident to the

[1] *Cp.* below, p. 195.

[2] More exactly, inversely proportional to the square root of the ordinate at the point on the abscissa where the median occurs. *Cp.* Encyclopædia Britannica Art. *Probability*. Sect. 138, 139.

[3] The supposition rejected as not appropriate to the data; above, p. 182.

median would be particularly large. But this is clearly not the case contemplated by Professor Mitchell. He attributes the objectionable dispersion merely to the paucity of the observations. We shall therefore do no injustice to his argument if we suppose the grouping to be of an ordinary kind, in particular the normal law.

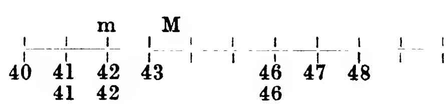
Upon this assumption it is at once to be admitted that the median is less accurate than the arithmetic mean, in so far as its probable error is a little greater, namely, in the ratio of about 1¼ to 1. That is all that we admit on the score of inaccuracy against the median. But we are by no means certain that we have apprehended Professor Mitchell's objections. Without being quite sure that we have located our author's position, we shall aim at three tolerably distinct points. (*a*) When there is a considerable interval between the position of the observation which forms the median and each of its nearest neighbours, then throughout a wide tract the position of the mean depends upon the accidents affecting a single observation. (*b*) The position assigned by the median is not perfectly definite. (*c*) The median is less responsive than the arithmetic mean to changes in the items.

The first objection (*a*) is to be gathered from the following statements. "Where the number of items to be averaged is small, medians are erratic in their behaviour. . . . For in such groups there is often a considerable interval between the midmost relative price and the relative price standing next above it and next below. No change in any of the items, large or small, can alter the position of the median unless it shifts an item from the upper half of the list to the lower half or *vice versâ*. But any change of this character, large or small, will make the median jump over the whole interval between its former position and that of the next highest or next lowest relative price, unless the change happens to place a new item within these limits" (85). Compare the dictum in the author's *Gold Prices . . . and Green-back Standard*. "The median . . . is rather erratic within limits of several points because its precise position is often dependent on the relative price of a single commodity which stands in the middle of the scale of relative prices."[1] So again it is said: "When the numbers of commodities in the index-number is small, medians are likely to prove highly erratic, representing less the general trend of prices than the peculiarity of the data from which they are made" (90).

[1] *Op. cit.*, p. 58. Quoted with comment in the review of the work in the ECONOMIC JOURNAL for 1898, Vol. XVIII., p. 581.

This objection is met by denying that the interval between two adjacent observations at the middle of the group is likely to be "considerable"; large relatively to the magnitude with which it is proper to compare that interval—that is, the *minimum mensurabile*, as we may say—that interval which is equal to (or of the same order as) the smallest degree which the compared method of measurement is capable of distinguishing with accuracy. For this minimum we may take at the least the "probable error" incident to the arithmetic mean. That the interval between adjacent observations is likely to be small compared with this minimum is sufficiently evidenced by the following proposition. When the number of observations (n) is large the interval at the middle of the group, which is as likely as not vacant, within which it is an even chance that no observation falls, is most probably very small compared with the probable range of the arithmetic mean (in the ratio of about $1 : \sqrt{n}$). When the number of observations is not large the proposition is less accurate. But it remains roughly true, as the number cannot be supposed very small consistent with the applicability of the theory of probabilities. Suppose, for instance, that the number of observations is *twenty-five*, the number of a group which, according to Professor Mitchell, "illustrates the erratic character of the median." Then the space at the centre, which is as likely as not to be vacant, is about a quarter of the probable range to which the arithmetic mean is liable.

As a concrete example, let us take the groups above cited, formed by the addition of ten random digits. Here is reproduced the central region of Group A :—

A.


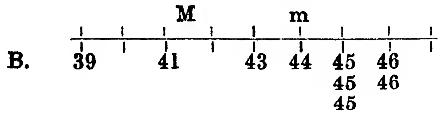
The figures below the line represent observations which have occurred. The letter M above the line is meant to show the position of the arithmetic mean, being 43·6. The median, designated by the letter m, is coincident with one of the observations, 42. There is here, no doubt, a vacant tract between 43 and 46. But it is not considerable, regard being had to the roughness of the computation. For the probable error to which the arithmetic mean is liable is nearly 1·2;[1] that of the median

[1] $= 0\cdot4769 \times \sqrt{\dfrac{10\times16\cdot5}{27}}$ (nearly)

is about 1·5.[2] Had the median occurred anywhere between 43

$$\sqrt{\frac{\pi}{2}} \times 1{\cdot}2 \text{ (nearly)}$$

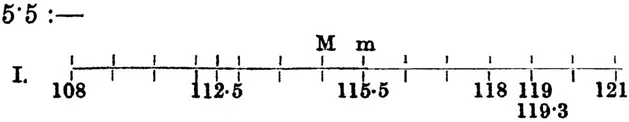
and 46 there would have been no reason for suspicion.



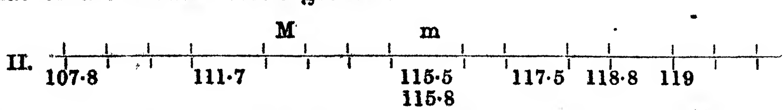
Group B also does not countenance suspicion of the median. In its central tract here exhibited the largest gap is only 2; and the median, 44, as it happens, gives a better approximation than the arithmetic mean, 41·8, to the true value, which is 45.

If the object had been to ascertain whether there was any difference in the constitution of Groups A and B—whether B, for instance, had been constructed by the superposition of more or fewer digits than *ten* (the given number for A)—the median would give nearly as good an answer to this question as the arithmetic mean. The only difference is the one already acknowledged that the probable error of the median is a little larger. That difference would disappear if the number of observations (*in pari materiâ*) on which the median was based had been somewhat increased. The median of *forty* such observations would have afforded as good a test as the *arithmetic mean* of *twenty-seven*.

To give an example more germane to the present discussion, we have taken out, for the year 1890,[1] the relative prices which enter into the groups, numbering twenty-five each, of which Professor Mitchell has instanced in connection with his remarks on the median. Here is exhibited the central portion of the first group or series. The arithmetic mean is at 115; the median at 115·5 :—



There is a vacant gap of 3 in the immediate neighbourhood of the median and of 4 not far from it. But what of that, seeing that the probable error of the arithmetic mean is about 3, and that of the median itself greater.



[1] From Table II. of the *Bureau of Labour Statistics*, 1914; whole number 149.

The central tract of the second series likewise does not bear witness against the median. The arithmetic mean is at 113; the median is at 115·5; the probable error about the same as for the first series.

(*b*) There seems to be expressed a fresh objection in the statement that it "is not always true of medians" that "their meaning is perfectly definite" (91). The meaning of the objection does not seem to us perfectly definite. Possibly it belongs to the class of difficulties apprehended in the case of numerous observations. Perhaps it is the same as the objection which we have already mentioned under that head. Perhaps it is the same as an objection which has been levelled by other statisticians against the median, viz., that it does not in general present a value so finely graduated as does the arithmetic mean. Consider, for example, the "race" above imagined, run by tossing coins—say a dozen every five minutes—and taking a step—say a quarter of an inch—forward or backward, according as each coin turns up head or tail.[1] If a number of players each proceed thus—starting from a starting-point labelled 100 (25 inches from zero)—at the end of the period the group will be distributed *discontinuously* at integral points. Now the arithmetic mean is not limited to integers, it may occur anywhere between two adjacent integers. But *primâ facie* the median *is* so limited, or, rather, it seems to be limited either to an integer if the number of constituents be odd, or to an integer $+\frac{1}{2}$ if the number of constituents is even. The objection is not particularly applicable to the data with which our author is dealing, relative prices graduated to a tenth of 1 per cent. In any case, the objection is not very serious, since by a proper adjustment of the data a fractional value can be obtained for the median.[2]

(*c*) There remains to be considered the objection that "arithmetic means are more representative averages than medians being affected by any change in the items of the group" (85) . . . "unlike medians, they ["aggregates"] allow every change in the price of every article to influence the result" (71). In making this objection, the author seems to have in view two groups *in pari materiâ* such that in passing from one to the other we find no change in the median, while there are changes among the other observations other than those determining the median,

[1] Above, p. 183.

[2] See the present writer's articles *On the Use of Analytical Geometry to represent . . . Statistics*, and *On the Mathematical Representation of Statistics. Journal of the Royal Statistical Society*, Vol. LXXVII., p. 732, LXXIX, p. 471, *et passim.*

which changes affect the more sensitive arithmetic mean. Upon this it may be remarked that if there is this difference in the behaviour of the two averages, it is not to the credit of the arithmetic mean. The slight advantage which we have already allowed to the arithmetic mean would not be enhanced by this circumstance. Supposing that slight advantage corrected by basing the median on a greater number of observations, then the sensitiveness attributed to the arithmetic mean would be rather a defect than an advantage.[1]

But does the difference exist? Does the median, oftener than the arithmetic mean, does it even often, remain unchanged from one group to another? This may be doubted, if the data are finely graduated, or if graduation of the median by adjustment is practised.[2] The median seems, indeed, but only seems, to be irresponsive in certain circumstances—of perhaps frequent occurrence in the statistics of prices—which we shall indicate by continuing the parable of the indoor race.[3] Suppose that in the first five minutes several of the numerous players—late or dilatory—do not make a start, and that their positions at the end of the period are registered as being at the starting-point. Accordingly, at the end of a short period a good number of observations would be heaped up at the starting-point; the median would appear unmoved. But, of course, the position of those players who have not moved—whose position is not the result of steps determined by tossing coins—cannot be used to ascertain the asymmetry of the coins. For *that* purpose it would be proper to omit those dead-head observations, or to prolong the game until the slow players should come in. But for *other* purposes, of perhaps greater interest to the players, as relevant to the betting, it might be proper to take account of those nullities.

Here, probably, is to be found the reason of the difference between Professor Mitchell and ourselves as to the worth of the median. We have been all along seeking to extricate from fallible observations a mean apt to represent the "general trend of prices" (9). That is the sort of index-number to which we

[1] The arithmetic mean in this respect might be compared with the method of examination by summing arithmetic marks practised at some public competitions as contrasted with examinations at one at least of our Universities where general unanalysable impressions have a due weight. The former method, no doubt, more frequently brings out the candidates as unequal, but the distinction does not correspond to a real difference.

[2] Above, p. 195, note 2.

[3] Above, p. 182. Note that the spike-shaped "mode" there noticed is formed by prices which have *not moved at all* in the period under consideration; to be distinguished from those which have moved less than one mill.

submit that the median may be appropriate. But Professor Mitchell in this criticism of this average has presumably often in view some of the more directly practical purposes which have been distinguished, such as *par excellence* the determination of changes in the cost of living. For these purposes we at once admit that the median is not so appropriate as the combination of the kind which Professor Mitchell calls an "aggregate."[1] We entirely agree with him that "the best form for general purpose series is a weighted aggregate of actual prices."

F. Y. EDGEWORTH

[1] The term "aggregate" is felicitous as suggesting approach to that type which, as above explained (p. 188), is furthest removed from an index-number, the term least connected with the Calculus of Probabilities; infelicitous so far as it masks the affinity, not to say identity, between the proposed construction and the weighted arithmetic means used by Giffen, Palgrave, and the older statisticians (as to whom see *British Association Memoranda*, 1887, p. 264, and 1889, p. 139 *et seq.*). The words of Sidgwick there quoted : "Summing up the amounts of money paid for the things consumed at the old and the new prices respectively . ." (*Pol. Econ.*, Bk. I., ch. II., Sect. 3), are appropriate to aggregates.

REVIEWS

Rural Reconstruction in Ireland: A Record of Co-operative Organisation. By LIONEL SMITH-GORDON, M.A. (Oxon.), Librarian Co-operative Reference Library, Assistant Secretary Irish Agricultural Organisation Society; and LAWRENCE C. STAPLES, A.M., sometime Parker Travelling Fellow, Harvard University; with Preface by GEORGE W. RUSSELL ("A.E.") (London: P. S. King. 1917. Pp. 279.)

MR. SMITH-GORDON and his coadjutor address a great variety of readers. The gospel of co-operation is preached not only to Irish farmers; the labourers also may hope for benefit from co-operative stores. The landlords, too—or, rather, those who formerly enjoyed that position—are reminded that now that they have descended from that invidious position they are freer to take a leading part in the life of the country. Sir Horace Plunkett's remarkable pamphlet, *Noblesse Oblige*, is appositely cited: "New duties—or, I would rather call them, opportunities—are emerging from the present social revolution, which far exceed in interest and importance those appertaining to the former relation of landlord and tenant." Co-operation being non-political, it is particularly open to the resident gentry to take a lead in this movement. Again, Irish politicians are warned against an exaggerated belief in political remedies—an exaggeration typified by the anecdote of the peasant who ceased planting potatoes on hearing that a Home Rule Bill had become law. Nor is it only the Irish reader to whom this widely interesting work appeals. Co-operators everywhere will be confirmed in their faith by the records and reflections here presented. Economists whose belief in the peculiar efficacy of co-operation may have been shaken by sceptical arguments—such as those examined in a former number of the ECONOMIC JOURNAL (1898) by Professor Gide—will here obtain additional experience to set against abstract analysis. The lessons of experience are, indeed, more convincing because they are interpreted by general reasoning. Our authors would

subscribe to Professor Pigou's explanation: "The form of Purchasers' Association may, in fact, utilise the altruistic motives alongside of the egoistic as a spur to industrial efficiency." With Professor Gide they would recognise that man is not wholly egoistic. Yet they by no means underrate the force of egoistic motives, the need of self-help. They justly claim for the movement directed by the Irish Agricultural Organisation Society that it encourages voluntary effort and self-reliance. They wisely observe that the ultimate criterion of Irish land legislation is to be looked for in its effect on character. Co-operation forms a needed complement to legislation which might have resulted in a relaxation of effort.

In the opening sentence of the Preface contributed by "A. E." it is truly said: "This volume contains the most complete and accurate history of a movement which has come to be of the highest importance to Ireland." The early history of the movement had, indeed, been traced by other able hands; notably in the ECONOMIC JOURNAL by Professor Finlay (1896) and by Sir Horace Plunkett (1897). But in view of subsequent developments our authors' record of co-operative organisation is more complete. The origin and root-idea of the system having been exhibited, the various growth of the widely ramifying branches is next traced. Of these the most flourishing—the earliest and the most successful of those cultivated by Sir Horace Plunkett—consists of the creameries. Irish butter, which in the earlier 'eighties could be described as principally used for adulterating margarine, now rivals the products of Denmark. The turnover of the creameries in 1915 was almost £3½ million. But in spite of their immense success the creameries have not entirely escaped the danger to which the "inveterate propensity to truck" exposes all forms of combination. "The creameries," we read, "are scarcely more free from competition in sale than they were at the beginning of the movement, for the unfortunate reason that they have not yet been convinced of the necessity of not competing with each other." The unreformed system of marketing still admits of every creamery competing with the rest in "cutting" prices. A peculiar disability under which the creameries labour is due to the falling off of the milk supply in winter consequent on the prevalence of grass farms. The remedy is the introduction of tillage suited to small dairy farms; a remedy which will perhaps be hastened by the war. The creameries sometimes combine with the work of dairying a function which belongs specifically to the agricultural societies—the collective purchase of agricultural requisites at a

reasonable rate, with a guarantee of quality. The agricultural societies also suffer from the discontinuity of their activity. "The members of the society take little interest in its existence except at the particular season of the year when the requirements are bought." The remedy, which consists in increasing the range of articles which the society buys for its members, is hampered by the condition attached to the grant from the Development Commissioners, that societies for other than agricultural purposes should not be promoted or admitted to recognition. The difficulty thus caused has been partly turned by the Irish Agricultural Wholesale Society. Breaking through hostile rings of manufacturers, this society can boast that it has secured for the farmer a reduction of 50 per cent. in the price of guaranteed manures.

We cannot hope within our limited space to render intelligible to our readers the workings of the various societies, which the authors describe minutely yet clearly. Passing over the societies described as "miscellaneous," and the home industries, we shall advert only to the credit societies. These, in point of magnitude and potential importance, deserve a foremost place; but in respect of actual success they rank low. Some improvement, indeed, under the auspices of the I.A.O.S. was made upon the old Loan Fund system which was inaugurated by Dean Swift, and on the more modern "trust auction." The latter method of borrowing consists in discounting a bill based on a fictitious sale. For example, "a farmer raised £10 on a cow by thus selling her to his son at an auction. Next day the same cow was sold by the son and bought by the father, so that £20 was raised on the one animal in two days." But the fair prospects of the credit societies have not matured; partly, according to our authors, owing to the adverse action pursued by the Department of Agriculture and Technical Instruction ever since 1907, when Sir Horace Plunkett was succeeded by another President. The Department is represented by our authors as continually thwarting the beneficent endeavours of the I.A.O.S. The traders influence the politicians; the politicians influence the Department; and the Department uses its influence to prejudice the cause of Co-operation. To that influence the authors ascribe in part the unsatisfactory financial condition of the I.A.O.S., which is far from being, as it ought to be, self-supporting.

Notwithstanding some gloomy signs, the authors take a cheerful view of the future. At least, their predictions are of a kind sometimes employed by the Hebrew seers when they prophesied blessings conditional on good conduct. If the creameries arrange

their marketing properly, if the agricultural societies secure continuous activity, if the farmers support the I.A.O.S. financially and take an interest in the local societies, if co-operative stores for the benefit of the labourers are created, then indeed will be realised all the blessings which are expressed in the co-operative motto: "Better farming, better business, better life." One great improvement in Irish life will be the mitigation of sectarian and political animosity, a result already becoming visible. "On the Committee of the I.A.O.S. and of the individual societies Catholics and Protestants sit in friendly discussion. Sinn Feiners and Constitutionalists, Unionists and Home Rulers forget for the moment their embittered differences." At least, "the dividing facts of life are being relegated to their true position by the realisation of community of interest in the economic sphere."

For a fuller description of the better life, the reconstructed Irish civilisation, which is to spring from the principle of co-operation, we turn to the glowing pages of "A. E." His sublime conception of national well-being is free from the taint of aggressive militarism. Independently originating an idea which had also occurred to William James, our author proposes to substitute for universal military service a sort of industrial conscription. "Suppose Ireland had through industrial conscription about fifty thousand young men every year at its disposal under a National Works Department." The benefits of discipline and obedience attributed to military service would be secured by labour conscription. The cost of beneficial public works would be reduced greatly. "National schools, picture galleries, public halls, libraries, and a thousand enterprises which now hang fire because at present labour for public service is the most expensive labour, all could be undertaken."

The new Irish civilisation is to be based on rural rather than urban industry. "The creation of a rural civilisation is the greatest need of our time." The picture of the future rural community is quite idyllic. "There will be, of course, a village hall with a library and gymnasium where the boys and girls will be made straight, athletic, and graceful. In the evenings, when the work of the day is done, if we went into the village hall we would find a dance going on, or perhaps a concert." Meanwhile, the Council of the Community might be discussing how best to lay out their abundant profits. "One might like to endow the village school with a chemical laboratory, another might want to decorate the village hall with reproductions of famous pictures, another might suggest removing all the hedges and planting the roadsides

and lanes with gooseberry bushes, currant bushes, and fruit trees."

A new "Sweet Auburn" seems to be realised. We are, indeed, in the presence of a poët, one of those by whom "the world is wrought Into sympathy" with new motives and ideals. The mere economist must recognise a creative force which transcends logical analysis. He will recall the feeling of Mill towards Carlyle. "I felt," says Mill, "that he was a poet and that I was not; that he was a man of intuition, which I was not." But Mill, while deeply influenced by Carlyle, did not surrender his own sturdy belief in the virtue of competition. We may follow the inspired author of *The National Being* with similar reservations. We need not accept the verbal inspiration of passages which seem to deprecate economic competition. "Our feebleness arises from economic individualism." "What really prevents an organic unity in Ireland is the economic individualism of our lives." "People compete against each other and undersell each other . . . stultify each other's efforts and reduce each other to wretchedness." We are not prepared to affirm with our author that "there never can be any progress in rural districts or any real prosperity without such farmers' organisations or guilds." Similar sweeping predictions have been made by high authorities as to co-operative industry. But these prophecies have failed, largely because they could be fulfilled in the spirit without being fulfilled in the letter. As Mr. L. L. Price has pointed out in his writings about Co-operation, its best parts can be grafted on to the wage system without tearing up that system by the roots. The spirit and essence of the co-operative ideals so beautifully imaged by the poet-economist will in the coming civilisation, we trust, be realised. But as to the form of the future economy, the words of another poet, reflecting on his own youthful prophecies, seem appropriate: the earth will be

"Something other than the wildest modern guess of you and me"

F. Y. EDGEWORTH

The Town Labourer, 1760–1832. By J. L. HAMMOND and BARBARA HAMMOND. (London: Longmans, Green & Co. 1917. Pp. xi., 346.)

This is the first volume of the sequel to Mr. and Mrs. Hammond's *Village Labourer*, which appeared in 1911. As its subtitle, "The New Civilisation," indicates, it is general in char-

acter and not exclusively economic. Much of the best work in it is not economic at all. The treatment, for the most part, is that of the essayist, as the titles of the earlier chapters suggest—"The New Power," "The New Discipline of the Factory," "The New Town," "Justice," "Order," "The Economic Conditions." Fresh historical material, those contributions from the Home Office papers which were so valuable a feature of *The Village Labourer,* first comes in chs. 4 and 5, "Justice" and "Order." There is no mistaking the authors' sympathies, but the balances are on the whole fairly held.

The chapter on "The Economic Conditions" is very slight indeed—there are only sixteen pages—though accurate enough so far as it goes. One might perhaps question the statement that when £100 of paper were only worth £86 10s. in gold there was, "of course, an *immense* inflation of prices" (p. 106: italics the reviewer's). Economists must not expect to find close study of the course of prices, of wages, or of population. The standard of treatment for such topics is illustrated by the statement: "It is well known that population increases with a decline in the standard of life" (p. 14). The point is not argued and is certainly arguable. Nor is there any critical discussion of the old system of legislative restriction of industry, whose decay prepared the way for the New Civilisation. Mr. and Mrs. Hammond call it a "web of prudence" (p. 197); but do not tell us how far the web was intact and whether its results were good, say, in 1760–90. (There is, by the way, very little in the book at all about those thirty years. They might almost have been omitted from the title page.) Perhaps, however, the discussion of the "web of prudence" is reserved for Vol. 2, which "will give in detail the history of the workpeople in various industries" (p. viii.).

After the chapter on economic conditions comes one which contains the best account yet published of the actual passing of the Combination Laws. It is called, The War on Trade Unions. Then two chapters on the employment of children. The sections on mills and mines are familiar, down to that classical manufacturer who took one idiot with every twenty sound parish apprentices. He is introduced with an "in one case at least" (p. 145), which suggests other cases; but these, if they existed, are not inquired into. Less familiar are the unpleasant truths in the section on chimney sweeps, though some of them could be found in Kingsley's *Water Babies.* There is no discussion as to how far the condition of the mines was an actual product of "The New Civilisation" and how far an inheritance from the

old. Such a discussion would have been useful. There is also room for discussion as to whether mill-hands, colliers and climbing boys are really the representative town labourers of the age.

The two following essays are "The Mind of the Rich" and "The Conscience of the Rich." "The Rich" do not get off easily, but the indictment seems substantially correct. It is that the average well-to-do person was a fatalist about the miseries of the poor; that he regarded employers *en bloc* as benefactors ("a person who, like Mr. Jackson, has employed from 100 to 130 hands, common gratitude would teach us to look upon as a benefactor to the community" as someone wrote to the Home Office: p. 209, n.); and that, generally speaking, he taught a religion of mere resignation as a buttress to the existing order. In this connection Mr. and Mrs. Hammond have many hard things to say of Wilberforce, but the summing up on him (pp. 244–5) is just.

An excellent chapter called The Defences of the Poor draws considerably on Home Office papers to illuminate the early history of trade unions. Perhaps the most important new documents relate to inter-union action, from places so far apart as Portsmouth and York in 1802 (p. 264); but there are other scraps of intercepted correspondence, and fragments of leaflets and posters of considerable value. Next, Methodism, the typical poor man's religion, comes up for judgment. Mr. and Mrs. Hammond regret that so many pennies which might have been spent on the class war went to the class meeting (p. 285), but conclude their very superior discussion of "this religion" with the magnanimous admission that it "must, in spite of itself, have made many men better citizens, and some even better rebels" (p. 287). In a theological or ethical journal it would be interesting to debate the "in spite of itself" as applied to citizens. It is, of course, true that Methodism did not set out to make rebels.

There are more chapters, but there has already been too much analysis. The main characteristics of the volume must be set out in conclusion. It is published now with a purpose—to make men believe that they can and must control economic forces in the new age, instead of explaining them "with complacent pessimism" (p. vii.). The authors seem to assume that such control was a century ago (or, for that matter, is to-day) a relatively easy thing, given good will. "The mistakes and troubles of an age are due to a false spirit, an unhappy fashion in thought or emotion, a tendency in the human mind to be overwhelmed by the phenomena of the time. . . . Men come to think that it is their business to explain, rather than to control, the forces of the hour." Maybe. But we

are not given an analysis of the bigger and blinder forces at work a century ago profound enough or critical enough to warrant a decision. There is plenty of good will, except, perhaps, for Methodists. As a rule even classes whom the authors mean to condemn are heard before execution. The facts as set out are, in the main, beyond dispute. Some criticisms of selection and stress that one is tempted to make must be deferred for lack of the second volume. But at the end of this volume one is not much nearer than before to any precise answer for that puzzling question :—just how far was it really within the power of the men of the Industrial Revolution to control the forces of the hour? Given, that is, their knowledge, not ours, their, not our, possibilities of administrative efficiency, their preoccupation with a twenty-two years' war, their inherited pieties and prejudices in place of the "swallowing of formulas" on which some of us pride ourselves.

J. H. CLAPHAM

Industry and Finance: War Expedients and Reconstruction. Edited by A. W. KIRKALDY. (London : Sir Isaac Pitman and Sons, 1918. Pp. viii + 371. Price 4*s.* 6*d.*).

IN many directions the war has rudely changed familiar routine; and among such disturbance of long tradition a breech in the series of annual gatherings of the members of the British Association must now be included. The volume before us affords welcome proof that the abandonment of the meeting last year has brought no intermission of the activity of the Economic Science and Statistics Section. Professor Kirkaldy can be cordially congratulated on the results collected here under his editorship, and published by the authority of the council of the Association, of the inquiries arranged by Section F during 1916 and 1917. The present book, it should be remembered, is the third of what may now be called a trilogy, and preserves the quality of its predecessors. In the main it is a continuation and development of investigations begun in former years into the two important subjects of the replacement in industry of men by women and of the effects of the war on credit, currency, and finance. On the first matter opportunity is given for gauging the extent and appreciating the nature of what has in fact occurred and for adjusting or modifying loose impressions that have been formed. On the other topic we know of no publication, whether official or private, where necessary information on what must remain a significant or unique chapter in the economic history of

this country has been more fully, fairly, and lucidly presented. A valuable repertory of precise detail is permanently stored; and in our judgment the service conferred thereby on future students has been enhanced by a more sparing use of critical commentary than that employed last year.

The bulk of the volume is thus filled; but an introductory chapter from Sir Hugh Bell, styled a "survey" and a "warning," an account of "women workers in agriculture" by Miss Thomas, a review of "suggested lines of development for workshop committees" by Mr. Renouf, and appendices, in which Mr. Gibson deals with monetary inflation and with the directions that future forms of borrowing might take, and Mr. Allen discourses on taxes *versus* loans and on railway fares, complete this weighty timely contribution of the economists and statisticians of the British Association to the scrutiny of the tremendous problems raised by the world-wide war, and by the "reconstruction" linked in many quarters, both interested and detached, with the victorious peace for the quick arrival of which all of us are longing. The editor, in a final note on transportation, offers appropriate remarks on the new sub-section added by the Council to Section F; and he writes thereon with the knowledge and authority of a recognised expert.

It would be impossible, within the limits of this review, to engage, tempting as the essay might be, in exhaustive discussion of the rich material we have indicated. The "President's Address," as it may be called, is the characteristic utterance of a shrewd business man. He accounts for the comparative ease with which the enormous cost of the war has hitherto been met in this country by pertinent considerations. In any case under ordinary conditions the annual income of the nation is in a large measure annually consumed. Repairs and renewals, usually undertaken, being in many instances not immediately imperative, have been postponed; and increased energy, "at any rate among women," has developed. As we should expect from a "convinced" free trader, he deprecates the practice of a different fiscal policy when the war is over, but, consistently with this attitude, he is generally distrustful of State intervention. He hopes that the burden of the debt can be borne, and that the payment of good wages will be maintained, by additional productivity, without the removal of the margin of profit, already narrowly reduced, or the trial of the specious substitute of a levy on capital for taxation, the weight of which, however assessed, must in reality fall upon income. Sir Hugh Bell, in fine, and his discourse is not the less

apt and forcible for that reason, says very much what we might have anticipated. Nor are we surprised to find Mr. Allen pressing here, as elsewhere, for drastic taxation in place of enlarged borrowing. There is, we think, force in his criticism that the practice hitherto followed in the respective use of these alternative methods of finance has not been based on any logical distinction of the separate purposes to which the money raised thereby is applied. Mr. Gibson in a similar spirit and with like reason complains of the "lack of a comprehensive scheme of continuous borrowing" "framed to minimise the labour of collection and of conversion in the future and based on principles of equity." "Our war finance," he declares, "has hitherto been more fitted to the period of the Napoleonic wars than to modern conditions of banking and credit."

He argues instructively that the "rate of interest is having less and less effect in attracting internal loans," and that their "character," the "methods of collection" and the "degree of advertisement" have become the "dominant factors." He contemplates, indeed, the possibility of "some form of equitable compulsory subscription," but he advances a scheme for financing the war for the remainder of its duration through voluntary lending month by month of a definite proportion of the balances of the deposits in the banks, using as a ready medium the pass books of their customers. He estimates that some 35 per cent. of the increase in prices up to the end of the third year of the war has been due to "monetary inflation"; but he is careful to point out that, as bank credit is "absolutely essential" to modern production, an expansion of such credit is not *per se* an "economic evil." Mischief is caused when it is not followed in the near future by increased production. He is also, we think, instructive in noting on the one hand the large transfer which has taken place in most banks from deposit to current accounts as Government disbursements find their way to business firms, and in emphasising on the other the increased velocity of circulation due to the passage of purchasing-power from persons who did not intend to exercise it at the moment to the Government which must spend immediately the funds at its disposal. In such curious ways, not always suspected, it is that inflation is the sequel of bank credit.

The chapter written by Mr. Renouf on workshop-committees is a contribution, as we believe, of indisputable worth to the discussion and solution of a practical problem of crucial importance. It proceeds evidently from close knowledge, sane judgment, and rare discrimination. A candid avowal of difficulties which may

arise and an impartial endeavour to appreciate the attitude of the parties concerned characterise the general aim and the particular arrangements of the scheme which he presents. He would thus hope to give the satisfaction, which is feasible, to the urgent and legitimate demand of the workmen for increased control of the establishments in which they work. As we might expect, the situation can, in the opinion of so capable and enlightened an observer, be best met by the use of more than one variety of committee, constituted on different lines, entrusted with different duties and invested with different kinds and degrees of power. For modern industry is, he says, "complicated and the attempt to introduce democratic ideas into its governance will necessarily make it more so." Nor need his plan of three committees—a shop-stewards' committee, a welfare committee, and a social union committee—be "accepted in its entirety."

The authoritative account supplied by Miss Thomas of women workers in agriculture is connected with the report on the replacement of men by women, as the appendices noticed before, which are furnished by Mr. Gibson and Mr. Allen, are related to that on the effects of the war on credit, currency, and finance. She exhibits *inter alia* the determining influence exerted by the stimulating example of educated women. In the report itself, we are told that the process of "dilution" has advanced markedly since last year; but it is also less true now than it was then that few, or no, women have been found replacing men in posts demanding under new arrangements the same degree of skill as that required from, and shown by, their former occupants. The range of industry on which women are engaged is much wider, and they have proved capable, after training, of work which is not merely "repetitive" or "routine" in character. But in some instances they have taken the place of other members of their own sex, drawn away from habitual occupations, such as the textile trades, to "munition works" and "municipal employments." The Committee reach the general conclusion that "replacement by women of skilled men has not been large," and that in the engineering trades the "position of skilled artisans returning" from their military service is "not likely to be seriously prejudiced by the competition of women workers," "unless repetition production is applied to non-war-work on an unexampled scale and with unexampled rapidity." The significance of this opinion needs no emphasis; and it may serve to demonstrate the illuminating character of the inquiry.

The Report of the other committee is, as we have hinted, full

of pertinent facts and relevant figures. They are brought together in a useful shape suitable for quick but sure consideration. We will indicate some conclusions which may be treated as typical. "One factor which has tended during the war to widen the margin between imports and exports," the Committee note, "is the great increase in freight rates and increased insurance charges." For the values of imports are stated "c.i.f." and include cost, insurance and freight, while exports are reckoned "f.o.b." and comprise besides cost only the charges of delivery on board ship. A corroboration of this instructive commentary was supplied by Sir Felix Schuster's last address to the shareholders of the Union of London and Smith's Bank. He remarked that the "position of our trade with neutral countries is more satisfactory than could have been supposed" as "our imports from those countries are balanced by our exports if in the latter be included the invisible exports such as shipping charges."

"Economic theory in relation to banking," the Committee again pronounce, "has been triumphant during the war." "The maxim that every debit has its *contra* credit somewhere in the books of the banks of the United Kingdom has been amply proved during the successive issues of war loans and the financing of the war." It has, for good or for ill, facilitated the behaviour of Chancellors of the Exchequer in grappling with the immense task before them. "In the main," the Committee observe, "credit manufactured by the Bank of England usually gravitates by transfer to the balances of the joint-stock banks at the Bank of England." And thus a "rotatory" movement can, it might even seem perpetually, be continued.

More suggestive than these reflections by themselves is the detailed account of one special variety of the "modus operandi" of this general process. That is furnished by the Committee in their description of the indirect effects of the issue of Currency notes on joint-stock bank reserves. They rightly speak of this affair as "exceedingly interesting." As the banks take the Treasury notes their balances at the Bank of England are debited with the amount, but, so long as they retain them in their own strong rooms, their aggregate cash reserves are not reduced. As they then pay out to their customers these reserves will decrease, until the Government, drawing on the credit created by the taking of the notes, substitutes its own securities in the Currency Note Redemption Account. For the Government drafts, passing first mainly to the credit of the customers of the joint-stock banks, will later, in the course of clearance, be credited to the balances of

those banks at the Bank of England. The aggregate cash-reserves of the joint-stock banks, which do not distinguish in the reckoning of such between legal tender and credit balances at the Bank of England, will thus in the end be increased by the issue of the Currency notes. The Committee are also of the opinion that these balances have been augmented by temporary loans made by the joint-stock banks to the Government through the medium of the Bank of England. For, they point out, the Revenue Returns show that the amount temporarily borrowed on the credit of ways and means advances during 1916 was larger than the increase in the item of Government Securities in the weekly returns of the Bank of England, and the Bank (understood to be acting for the Treasury) has, it is known, taken during the last two years spare balances from the joint-stock banks at fixed rates of interest for short and varying periods. It has thus not only itself lent directly to the Government but probably it has also been an agent and an intermediary for advances from the joint-stock banks. The growth in the aggregate cash reserves of those banks, amounting during 1916 to £113,000,000, like the addition of £207,134,000 to their deposit liabilities during the same year, is connected in this way with expansion of credit. The precise part played in that movement by the Currency notes is at any rate made more plain through the explanation advanced by the Committee; and they have rendered a service in the fresh light thrown on a dim corner of our war finance.

Further elucidation may be properly desired in that particular direction, and the removal of uncertainty might, it is possible, mitigate some apprehension which is felt. We have been recently assured by a Committee of the House of Commons that, interrogated by them, the Treasury authorities have declared that the issue of Currency notes has been hitherto made, not, as in many former instances in other countries, by the Government itself in direct remuneration of its servants, or in immediate payment of those who supply it with munitions and other goods, but through the banks, in response to the requests of these institutions for a supply of legal tender currency to meet the changing requirements of their customers, and in return for consideration given for the advance. The original Act, indeed, does not confine the circulation to this particular channel; and it might, we conceive, strengthen the credit of the country abroad, and even at home, if the Chancellor of the Exchequer would pledge himself and the Cabinet publicly to the definitive continuance of the mode of issue hitherto adopted. It would even seem to be so far innocuous

as it resembled the satisfaction of the demands of the banks for silver and for bronze though they are only tokens and not legal tender. But it must nevertheless not be forgotten that the disuse of the policy of including the gold backing in correspondence with the enlargement of the issues—a laudable enterprise started at the outset but soon abandoned—is no auspicious a feature of the issue, and raises, indeed, a further question that calls for prompt consideration. And, if the Committee of the British Association be correct, the Government itself draws on the credit created in its favour by its response to the requests of the banks for the supplies of a currency which, as Professor Nicholson contends, is *de facto* inconvertible, though nominally it may not bear that character. Nor is there any other remedy for "inflation" occasioned by excessive issues than contraction, or insistance on the transfer of the issues of a gold equivalent in exchange for the supply demanded. The inference is abundantly justified that the present position of these Treasury notes is irregular if it is not discomforting.

The small proportion of the deposits in the savings banks withdrawn during the war, cited by the Committee as proof of the greater stress placed by the public interested in those banks in safety, and on facilities for deposit and removal, than on the rate of interest paid, the decisive influence of the entry of President Wilson into the conflict in removing the need for further deposit of securities as collateral guarantee for loans from his people, the popularity of Treasury bills, attributable to their short term of currency, the possibility that subscribers to the last loan raised would have preferred a smaller yield to the sacrifice involved through the depreciation of their other stock sold to enable their subscription, the estimate of £250,000,000 as advanced by the banks to their customers to assist their application for allotment, the recognition of the banking world that the net effect of the issue of war loans is a series of internal transfers of credit among their depositors and the banks themselves, the opportune help rendered by the Japanese in facilitating British purchases on the other side of the Atlantic by the transfer of their command of American dollars, the attitude of the Scandinavian countries in permitting exchange rates to fall in preference to taking gold from the Allies, and the effect of the closer blockade instituted by the United States on neutral exchange rates on London—all these are other points to which the Committee opportunely draw attention. They may fittingly be placed on record as signs of the financial times in which we live.

Mr. Franklin, discussing in a special section the movements of the foreign exchanges, observes pertinently that we are the one European country with a large and regular gold income derived from our African and Australian dominions, and that our fiduciary currency is not unwieldy by comparison with those of other belligerents. We shall be therefore in a better position than they (with the exception of America) for returning after the war to a normal state. Mr. Spalding, treating of the same subject in another section, notices the "desperate step" taken by Germany in replacing the two-mark silver piece by paper, and, arguing that the "increased velocity" of circulation in our own and in other countries compensates for any increased work of exchanging that currency has been called to perform, associates a growth in its quantity with the sequel of inflation. Finally the Committee consider the question of national expenditure and taxation. They record precisely what has happened, but they hint, not obscurely, at omissions and mistakes that have been made. They evidently subscribe to the programme which would substitute taxation for borrowing. But in the main they "teach" rather than "preach"; and, because their report deserves eminently the epithet of "lucifera," we are confident that it may not improbably earn the the repute of having been "fructifera."

L. L. PRICE

I.—*The Conditions of Social Well-being considered in the Light of the War.* By RICHARDSON EVANS. (Edwin Trim & Co., Wimbledon. 1917. Pp. 56.)

II.—*Capital and Labour: a Series of Articles on Conscription of Wealth, the Need for Industrial Reconstruction and for the Permanent Removal of Labour Unrest.* By SIR CHARLES W. MACARA, BART. (*The Cotton Factory Times*, Ashton-under-Lyne. 1918.)

THESE pamphlets both profess to deal in the main with questions of reconstruction after the war. That by Mr. Richardson Evans contains a "record of the thoughts suggested" by a conference which met fortnightly between December, 1916, and May, 1917. The members of the conference consisted of some employers and workmen resident at Wimbledon, together with a small number of other interested persons, amongst whom was the author, who himself contributed a paper on the "Resumption of Industry," which is here reproduced.

Mr. Evans speaks of his "uncomfortable perch on the fence,"

and his reflections on the discussions which took place at the conference certainly suggest that he would have been more comfortable on a seat amongst the employers. For he appears to have been much impressed by the kindly spirit displayed by the representatives of capital, and equally pained by what seemed to him the unreasonable attitude of the working-class representatives.

He is strongly opposed to Socialism, and reproduces with considerable skill the now well-known arguments against it. He is disturbed because Trade Unionists sometimes refuse to "listen to the counsels of their leaders." He is nervous about the effects upon the accumulation of capital and the maintenance of parental responsibility, of large expenditure on such reforms as free medical treatment for maternity cases and free meals for school children; he is half-hearted with regard to the question of the abolition of half-time under the age of sixteen, and so on.

But with all this he is fully alive to many of the glaring defects of existing industrial and social conditions, and is sincerely anxious to discover remedies. His constructive suggestions, however, amount to little more than the statement that "Co-Partnership, Profit Sharing, Co-operation are the roads which lead to a happier future" (p. 50). A paper contributed to the conference by Mr. A. W. Pollard, which is included in the pamphlet, contains a few further suggestions of a constructive nature, but which are not of a very practical kind.

Mr. Evans appears to be on the whole optimistic about both the present and the future, and perhaps over-sanguine, when he says: "For once, the nation is one great co-operative association. It will not easily relapse into the notion that it consists of privileged and unprivileged classes" (p. 29). Again he is surely on dangerous ground when he asserts dogmatically that "the main burden" (*i.e.*, of the war) "has fallen on the wealthier order," and that, allowing for the rise of prices, "it remains true that never were the working population relatively more prosperous" (p. 29).

The pamphlet contains a good deal of very elementary economics, and in the course of his explanations of economic principles the author is continually dwelling on the importance of the largest possible output of wealth, and he lays altogether insufficient stress on the fact that output must be limited by the effects of production on the lives of the workers. "Everything," he thinks, "that tends to suspend production, or reduce efficiency, or lessen output is an injury not only to the particular trade but to the community" (p. 13), but so is everything which tends unduly to increase the strain of labour or to curtail the joys of life. He

also omits to point out that restriction of output is constantly resorted to by employers, not to lighten toil, but to augment profits. In his last sentence, however, Mr. Evans shows signs of wavering in his economic creed when he says: "The well-being of a people does not rest on a basis of material comfort. It is the things of the soul that count" (p. 50).

The author holds that employers and employed are not opposing armies. Sir Charles Macara takes a very different view, and recognises that there is a real conflict between Labour and Capital, and the "watchwords" of his very badly printed twelve-page pamphlet, a reprint of five articles contributed to the *Cotton Factory Times*, are unity and concord.

In most of the articles he calls for the resuscitation of the Industrial Council of 1911 (in the establishment of which he played such a leading part) as a means of promoting unity. In the first paper, however, he takes Mr. Bonar Law severely to task for "coquetting with the predatory type of Socialist" in connection with the question of the conscription of wealth. A levy on capital, he thinks, spells industrial ruin, but he hardly appears to have made out his case. Perhaps this would be too much to expect within the limits of a single newspaper article. In another paper he suggests that: "It would be a good thing if those engaged in the cotton industry—spinners, manufacturers, and merchants—were to get the sanction of the Government for raising a fund for industrial reconstruction, to be deducted from excess profits." The fund might be all very well, but we doubt whether the plan of raising it by means of deductions from excess profits is one which is likely to find much favour with Chancellors of the Exchequer.

H. SANDERSON FURNISS

Agriculture in Berkshire. By JOHN ORR (Oxford: The Clarendon Press, 1918. Pp. viii + 208. 8*s.* 6*d.*).

IN this book Mr. Orr adds to the "survey" of farming in the county of Oxford, made for the Institute for Research in Agricultural Economics established at the University, a similar investigation of the adjoining Berkshire. To this fresh essay he has brought the power of lively description of the salient features of the country-side and the capacity for getting apposite news from divers country-folk with whom he has talked, which were merits of his earlier book. His independence in bestowing praise or blame, as circumstances demand, is not less evident; and he is as quick to note as he is careful to record the lessons to be drawn

from failure or success. As his inspection coincided with the spring and summer of 1916 the disturbing or stimulating influence of the war on the acts and thoughts of those busied with the cultivation of the soil and the rearing of livestock can be discerned, while the experience of agricultural depression, although it had a marked sequel in changed methods and altered aims, was, it would seem, becoming a dulled memory of a retreating past. We will quote a passage which we think is illustrative as a summary of much that Mr. Orr has occasion to infer, or to suggest, with regard to the past history, the present state, and the future possibilities of Berkshire farming. "Farmers," he says, "who have chafed at the exacting work connected with dairy farming have taken the opportunity of adopting or resuming the system of corn-growing with fattening cattle or sheep for livestock, although even this statement calls for qualification, since many have sold their flocks and reduced their system almost entirely to one of growing corn and hay. There are a few farmers, looking more to the future, who have maintained their herds and flocks in full numbers, and very few who have increased them. They expect that some day soon the price of corn will fall, mixed farming will become necessary, and a demand will be made for cattle and sheep."

Taking notes in this instructive fashion, Mr. Orr travels through different districts of the county, and we congratulate him once again on a happy union of serious purpose with relieving touch in which, as we should judge, he equals or surpasses his predecessor in this particular area, Dr. Mavor, to whom he frequently refers. The Vale of the White Horse, the Downs, the Kennet Valley and East Berkshire are thus investigated. In the more general treatment, which follows, of the "agricultural partnership," of "estate management," "farm management," and "labour," he has, we suspect, found it difficult to break fresh ground. He repeats, or tries to develop and emphasise, much that he had hinted or advanced in the other survey; and, as there, so here the ideals fixed for landlord and for farmer are, perhaps rightly, high. Their attainment in fact is another question, though Mr. Orr is both shrewd and informed. But we are tolerably sure that his bold conception of the *rôle* he would assign to Government in so guiding production as to prevent a discouraging fall of prices from following on too large supplies is more grandiose and less practicable than the arrangement or preservation of the tariffs or the bounties of which he writes as apparently less satisfactory or trustworthy or lasting alternatives, A "balance

among all the branches of production in order to guard against injury to particular sets of producers and consequent detriment to all" is, he truly says, a "problem" not only "imperial" but "international." It is indeed, in his own words, "as complicated and difficult as possible." Yet he himself believes that "the task is not so hopeless." "It is," he adds, "a splendid piece of work for Governments, this turning of such a fine and elaborate instrument." But surely this may appear to prosaic commonsense not unlike the proverbial instances of "ambition o'erleaping itself." The final technical chapters on soils, etc., as in the Oxfordshire inquiry, are a necessary addendum carefully designed and successfully achieved. L. L. PRICE

Forecasting the Yield and the Price of Cotton. By HENRY LUDWELL MOORE, Professor of Political Economy in Columbia University. (New York: The Macmillan Company, 1917. Pp. vi + 173; 8vo.)

IN this monograph Professor Moore illustrates the application of the method of correlation to the prediction of the yield of cotton in the United States, and to the relation between yield and price.

The former problem occupies the bulk of the volume. The nature and aim of the official crop-reporting service are first described. Reports as to the "condition" of the crop are drawn up at the end of each month, from May to September, the results being expressed as percentages of an imaginary "normal." It is then assumed that the yield per acre of the current year will stand in the same ratio to the average yield of the five preceding years as the "condition" of the given month in the current year to the average "condition" in the same month of the five preceding years. The method can be tested by comparison with the actual yield as finally reported, and Professor Moore subjects it to this test for the twenty-five years 1890-1914. The results are interesting. (1) The May report is worse than useless: the correlation between prediction and fact is small and *negative*. (2) The June report is of little service: the correlation is small, only 0·292. (3) The July and August reports attain rather better results, correlations 0·595 and 0·576 respectively, and the September report the correlation 0·685. There is thus a general, but not unbroken, tendency to improvement as the harvest is approached. But further, (4) the official method tends inherently to underestimate the yield, and thus favour the producer by

putting up the price. These results are not happy for the official method; having regard to the great importance of the cotton estimates, it is hoped that they will receive attention. It may be mentioned that there was a very full report on the correlations between American crop forecasts and the actual yields presented at the 1913 (Vienna) meeting of the International Statistical Institute, which the reviewer can only cite from memory owing to absence from books and papers. The final volume of reports never reached members before the war, but Professor Moore would find this report of considerable interest for comparative purposes.

The prediction of yield can also be effected from the weather with greater accuracy in general than from the Board's crop reports. Taking into account temperature and rainfall, for example, and the crops in Texas, Georgia, Alabama and South Carolina, for all the States except Texas the forecast from the weather gives a more accurate prediction than can be obtained from the Bureau's reports of *one month later*. It is to be hoped that work on these lines will be greatly extended.

But the total yield is dependent on the acreage planted as well as on the yield per acre. The Bureau of Statistics does not publish an estimate of acreage until July 1st, and a fairly reliable estimate earlier in the year would be useful. Professor Moore points out that the acreage planted is largely dependent upon the good or bad fortune of the cotton farmers in preceding years. The correlation of the percentage increase in acreage during the current year as compared with the preceding year, with the increase in price for the preceding year on the year before, is $+0{\cdot}532$; the correlation with the percentage change in total production for the preceding year on the year before is $-0{\cdot}641$. It is thus possible to predict acreage with as much accuracy as yield.

Professor Moore's note on prices is briefer. The correlation between the percentage change in price and the percentage change in production of cotton from year to year (1889-1913) is $-0{\cdot}819$. But this is a gross result, and it may be asked: What is the relation between the changes in the price of cotton and the changes in the amount demanded, when there are no changes in the purchasing power of money? This problem is approximately solved by the use of the method of multiple correlation, introducing as a third variable the Bureau of Labour's Index Number for prices of all commodities. This gives the linear regression equation

$$x_0 = -0{\cdot}97x_1 + 1{\cdot}60x_2 + 7{\cdot}11$$

between x_0, the percentage change in the price of cotton, and x_1 and x_2, the percentage changes in production and in the level of general prices respectively, the coefficient of double correlation being 0·859. The result is certainly interesting and useful, but surely it leaves untouched Professor Edgeworth's doubt "whether Jevons's hope of constructing demand curves by statistics is capable of realisation"? The equation is an approximate, average, linear relation; it does not bring out the real form of the demand curve. The section heading, "A Complete Solution of the Problem," claims a little too much.

G. U. YULE

An Introduction to Statistical Methods: A textbook for college students, a manual for statisticians and business executives. By HORACE SECRIST, Ph.D., Associate Professor of Economics and Statistics, North-Western University, Evanston, Illinois. (New York: The Macmillan Company, 1917. Pp. xxi+482; 8vo. Price $2.)

As indicated by the sub-title, Professor Secrist has endeavoured to furnish in this volume a textbook of statistical methods suited especially to the needs of students "in colleges of business administration" and of the business man. Having regard to this aim, the treatment is wholly non-mathematical, not even the most elementary algebra being used. This limitation has the inevitable defect of its virtues, for a few symbols would at times greatly lighten the verbal, not to say verbose, explanations. The field covered is correspondingly limited; wage statistics and price index-numbers are dealt with in some detail; but vital statistics and their methods are practically excluded.

To state the scope of the volume a little more fully, the author, after a short introduction on the purpose of statistical study, the meaning of statistics, and the relation of statistics to business and to government, describes the principal sources of statistical data and the methods of collection, and gives useful cautions as to their limitations and significance; references and illustrations are naturally drawn from American data. A chapter follows on units of measurement, and wage statistics are then taken as a specific case, the difficulties of definition, the various sources and their respective defects, schedule forms, and so forth, being treated in detail. Following chapters deal successively with tabulation (with some almost incredible examples of bad tabulation, the references mercifully suppressed), diagrammatic presen-

tation, graphic presentation, and averages (mean, median, and mode). There then follows a section on index-numbers, the first chapter dealing with the general principles, and the second, which should be very useful to the English student, with American price index-numbers. Concluding chapters deal briefly and in a simple elementary way with dispersion and skewness, and with correlation.

The treatment is simple, but to the present writer at least seems at times to become lengthy without becoming altogether clear, and a different arrangement could be at times preferable, *e.g.*, full illustrations of forms of frequency distribution before the chapter on averages. The *mode* is not " the characteristic which most frequently appears," according to the original definition of Professor Pearson. who introduced the term; it is better to use some other word, e.g., predominant value, for the empirical mode. The remark : " While variables are expressed as percentages, the base upon which they are computed is not a total, but the first, *the last*, or an average of the different variables. Of these alternatives *the last*, under certain conditions, is undoubtedly superior " (p. 225, my italics), is ambiguous; the " last-named " is apparently meant. The section on the probable error (pp. 410-15) is likely to prove hopelessly confusing to the student, as the term is used both for the quartile deviation in an actual distribution (" For a probability distribution the probable error is approximately two-thirds of the standard deviation ") and for the probable error of sampling. Statements that the " probable error . . . is a means of testing the reliability of samples, provided that data approach the normal probability distribution," or that " the probable error is to be used only when distributions approach the normal probability form," are incorrect; the condition is that the distribution of the errors of sampling, not the original distribution, shall be normal. The use of the probable error in the case of small samples is limited because, *inter alia*, the assumption cannot then be made.

The author deals well with the necessity for clearness in tabulation, but a few of his own tables might be improved in this respect. The heading of Table G, p. 216, is not clear as respects the last two columns (" Less than " or " More than "—which of the limits given on the left?), nor is Table A, p. 382, satisfactory (Why are the groups of years so arranged? Why 5, then 10, then 5 years? Per cent. of what?).

The entirely non-mathematical character of Professor Secrist's work, and its discussion of such matters as tabulation and diagrammatic representation, will render it useful to the appropriate class

of student, and its description of American data should be of service to the English reader. The best features of the work are the cautions as to the necessity of the worker familiarising himself with the actual meaning and limitations of his data, and the treatment of graphics. Useful references to the literature are given at the end of each chapter.

G. U YULE

Postal Savings: An Historical and Critical Study of the Postal Savings Bank System of the United States. By EDWIN W. KEMMERER, Professor of Economics and Finance, Princeton University. (Princeton: University Press. London: Humphrey Milford, Oxford University Press. 1917. Pp. iv+176, 8vo. Price 5*s*. 6*d*. net.)

THE United States Postal Savings Act was approved on the 25th June, 1910. In July, 1917, Professor Kemmerer "integrated and revised" two magazine articles upon the Act and its first six years of working. The book before us is the result. It is rather soon for a history of the system. The criticism goes no further than what might have been offered by the author himself in 1910.

The almost unanimous opposition of the bankers to the passing of this Act is pitiful reading. In their view it was not called for. Its competition with bankers was compared to highway robbery. It would be a "plunge into the frightful slough of socialism." The circulating medium of the producing regions would be depleted and the money of the rural communities would "leave home" to be swept into the speculative markets of Wall Street. Perhaps we like our bankers timid; but we should not expect them in the twentieth century to be quite so ignorant of the long and identical experience of other countries.

The panic of 1907 helped the movement in favour of a Postal Savings Bank. But the Act of 1910 testifies to the jealousy and the power of the banking interest. The word "bank" was not to be used in connection with the Postal Savings Depository Department or its Offices. The rate of interest allowed, nominally 2 per cent., is the lowest in the world, in a country where capital can always command a good return. In practice the rate works out at about 1¼ only. No interest is paid for a fraction of a year. No one may deposit more than 100 dollars in one calendar month or 500 dollars in all. Accumulated interest, like excess deposits, bears no interest. The critic of bureaucracy will note with a smile

that interest drawn out and deposited afresh as principal is purged of its disability. Accounts can only be operated upon at the offices where they are opened, and can be transferred only by closing down (at the loss of accumulated interest) and by opening afresh at a new centre. Deposits must be invested *pro rata* with approved local banks. The facilities offered to the depositor are far below those in European countries.

Already it is evident that the opponents of the Act imagined vain things. The monthly limitation has been abolished and the total enlarged to 1,000 dollars. The system, with all its imperfections, is full of vitality. But unless the American citizen changes his characteristics he will not long remain content with a Postal Savings Depository System which is the least attractive and the most backward of its kind.

HENRY HIGGS

NOTES AND MEMORANDA

CHANGES IN IRISH EXPORTS DURING TWELVE YEARS.[1]

THE Statistical Branch of the Department of Agriculture and Technical Instruction for Ireland has been publishing now for twelve years an annual estimate of the " Trade in Imports and Exports at Irish Ports." I propose in this paper to examine the changes in the Exports of Ireland during the twelve years, 1904 to 1915 inclusive, as revealed in these annual "Reports." The Exports of Ireland are enumerated in the 1904 Report under 322 distinct items; in that of 1915 under 328. When analysing them I take the latest revised figures given in detail, and the 328 items are reduced into 14 groups—my plan being to group together all items which result from the one industry or employment. Take, for example, the Exports of the year 1913: their total value was then £73,886,410; but 281 miscellaneous small items only account for £12,639,927 out of that total, while 47 large items (grouped into thirteen main industries or employments) account for as much as £61,246,483. It is the fluctuations among these thirteen main employments that I wish to study. The separate items to be grouped together to get the total export for each employment were carefully studied, and must now be stated. (I give them here in the order of their importance as in 1915.)

I. *Linen* (4 items):—1. " Flax"; 2. " Linen Yarn"; 3. " Linen Goods"; 4. " Thread"; [I omit " Waste (Flax, Tow, and Hemp)".]

II. *Cattle* (6 items):—1. " Fat Cattle"; 2. " Store Cattle"; 3. " Milch Cows"; 4. " Springers"; 5. " Other Cattle"; 6. " Calves."

III. *Poultry* (3 items):—1. " Eggs"; 2. " Poultry"; 3. " Feathers."

IV. *Butter* (5 items):—1. " Butter"; 2. " Margarine"; 3. " Cheese"; 4. " Cream"; 5. " Milk (not Condensed)."

[1] Abstract of a Paper read to the *Statistical and Social Inquiry Society of Ireland* on April 26th, 1918.

V. *Steam Vessels* (1 item) :—Its value jumps when big ships happen to be launched, *e.g.*, £6,703,250 in 1914, £4,721,500 in 1915.

VI. *Bacon* (6 items) :—1. " Pork " ; 2. " Bacon" ; 3. " Hams" : 4. " Tripe " ; 5. " Meat, Preserved " ; 6. " Sausages." [I omit " Fats."]

VII. *Brewing* (3 items) :—1. " Ale and Beer " ; 2. " Porter " ; 3. " Yeast."

VIII. *Woollens* (9 items) :—1. "Wool Yarn" ; 2. " Blankets" ; 3. " Carpets " ; 4. " Roofing Felt " ; 5. " Woollen Goods " ; 6. " Hosiery " ; 7. " Drapery and Haberdashery" ; 8. " Hats" ; 9. " Apparel, unclassified."

IX. *Cotton Goods* (1 item) :—This probably represents the Shirt Industry.

X. *Sheep* (3 items) :—1. " Sheep " ; 2. " Lambs " ; 3. " Wool."

XI. *Whisky* (1 item) :—Called " Home-made Spirits (Whisky, etc.)."

XII. *Pigs* (2 items) :—1. " Swine, Fat " ; 2. " Swine, Store."

XIII. *Horses* (3 items) :—1. " Stallions " ; 2. " Mares " ; 3. " Geldings."

XIV. *Other Exports* (281 items) :—This includes everything not enumerated in the above thirteen groups. There are but few large items—such as Tobacco, Biscuits and Confectionery, Potatoes, Oats, Hides and Skins, Machinery unclassified, Rope Cordage and Twine, etc. : by " large," meaning of values approaching half a million sterling, or thereabouts.

In a Table (below) I give the result of this *analysis by "employments"* of the Exports of Ireland for each of the twelve years 1904-1915. We there find how these different employments have fared during the period, and the results are remarkable. One would hardly expect in a short period like twelve years to find such *changes in the relative importance of Irish industries*, as are shown by the following comparison for three dates (Table I.).

In this Table the ten-year period from 1904 to 1913 may be considered normal; but the rise in the figures from 1913 to 1915 is interesting too, as showing how the inflation of prices during the war has affected different exporting industries. Table I. shows that Live Stock has not benefited from the inflation of war-time quite so much as the production from Irish industries. This fact is certainly an unexpected result of this analysis.

However, it is the normal expansion of Irish exports, which had been in progress for the ten completed years prior to the outbreak of the war, that seems to me the really significant fact

TABLE I.—CHANGES IN IRISH EXPORTING INDUSTRIES.

(The figures are Estimated Values, sterling.)

Order of Value.	1904.		1913.		1915.	
		£		£		£
I.	Linen ...	9,026,890	Linen ...	16,572,208	Linen ...	17,762,884
II.	Cattle ...	8,985,336	Cattle[1] ...	15,464,468	Cattle ...	15,826,617
III.	Butter ...	3,271,827	Bacon ...	4,430,061	Poultry ...	6,223,905
IV.	Poultry ...	2,887,772	Poultry ...	4,048,088	Butter ...	6,164,636
V.	Whisky ...	2,343,496	Butter ...	3,954,611	Bacon ...	5,686,009
VI.	Bacon ...	2,205,657	Steamers	3,148,000	Steamers[2]	4,721,500
VII.	Brewing ...	1,879,445	Cotton Goods ...	2,722,350	Brewing ...	2,817,640
VIII.	Sheep ...	1,747,677	Brewing ...	2,554,044	Woollens...	2,551,859
IX.	Pigs ...	1,742,039	Whisky ...	2,008,500	Cotton Goods ...	2,519,523
X.	Steamers	1,500,000	Woollens	1,852,554	Sheep ...	1,860,438
XI.	Cotton Goods ...	1,320,802	Sheep ...	1,784,142	Whisky ...	1,859,977
XII.	Horses ...	1,291,165	Horses ...	1,703,260	Pigs ...	1,172,139
XIII.	Woollens...	989,832	Pigs ...	1,024,197	Horses ...	1,121,520
	Total, above ...	39,191,938		61,246,483		70,288,647
	Other Exports...	10,206,598		12,639,927		14,174,761
	Total Exports ...	49,398,536		73,886,410		84,463,408

[1] Cattle exports—reduced to £8,236,868 (by the Larkin Strike at Dublin) during 1912—were abnormally large in 1913. [2] Steamers in 1914, had been up to £6,703,250.

which has to be analysed. It is the comparison of the year 1904 with the year 1913 that reveals the direction in which this expansion has taken place. The total value of Irish Exports rose from £49,398,536 to £73,886,410, which is very nearly 50 per cent. of increase (49·57 per cent.). Of the thirteen main exporting industries of Ireland, eight are capitalised manufactures (viz., Linen, Woollens, Cotton Goods, Steamers, Brewing, Whisky, Bacon, and Butter), and five are Live Stock industries (viz., Cattle, Horses, Sheep, Pigs, and Poultry). The eight Manufactures have increased the total value of their exports from £22,537,949 to £37,242,328: which is an increase in the ten years of 65·24 per cent. Meanwhile, the five Live Stock industries have lifted the total value of their exports from £16,653,989 to £24,024,155: which is a rise of 44·25 per cent. It is certain, therefore, that in its export trade Ireland is predominantly an industrial rather than an agricultural country; and this surprising feature has become more accentuated by the changes of the last ten or twelve years. If statistics could ever be regarded as sensational, certainly that is the sensational result of this statistical investigation.

What we are here considering is the export trade of Ireland: it is not quite the same thing as the productive industry of the country. For example, the Crops of Ireland do not make much showing among its Exports. Irish Crops are mostly consumed at home—they are exported in the form of Live Stock. It may appear to some minds, therefore, that Tillage Crops in Ireland are unimportant and that the Live Stock production is the main business of the Irish farmer. At the prèsent moment, when

TABLE II.—ANALYSIS OF IRISH EXPORTS FOR EACH YEAR, 1914 TO 1915, INCLUSIVE.

Exporting Industry. (Order of 1913).	1904.	1905.	1906.	1907.
	£	£	£	£
I.—Linen	9,026,890	9,304,315	11,037,604	12,049,520
II.—Cattle	8,985,336	8,928,253	9,146,915	10,419,430
III.—Bacon	2,205,657	2,276,394	2,421,367	3,129,237
IV.—Poultry	2,887,772	3,266,522	3,511,915	3,672,750
V.—Butter	3,271,827	3,441,716	3,688,343	4,117,420
VI.—Steamers	1,500,000	2,500,000	2,900,000	2,400,000
VII.—Cotton Goods ...	1,320,802	1,268,085	1,437,174	1,628,828
VIII.—Brewing	1,879,445	1,942,025	2,126,400	1,887,047
IX.—Whisky	2,343,496	2,179,407	2,139,587	2,315,309
X.—Woollens	989,832	1,012,823	1,051,201	1,202,320
XI.—Sheep	1,747,677	1,807,041	1,866,146	1,879,223
XII.—Horses	1,291,165	1,427,975	1,578,005	1,541,815
XIII.—Pigs	1,742,039	1,272,091	1,478,105	1,636,681
Total (above)	39,191,938	40,626,647	46,382,762	47,879,580
Other Exports	10,206,598	10,547,671	9,215,835	11,279,952
Total Exports	49,398,536	51,174,318	55,598,597	59,159,532

Exporting Industry (Order of 1913).	1908.	1909.	1910.	1911.
	£	£	£	£
I.—Linen	10,167,234	13,796,903	15,577,311	14,952,140
II.—Cattle	10,935,197	10,751,550	11,454,285	9,566,393
III.—Bacon	3,249,170	3,588,235	3,863,176	3,654,065
IV.—Poultry	3,560,449	3,753,465	3,703,628	3,826,074
V.—Butter	4,185,180	3,836,476	3,820,501	3,929,540
VI.—Steamers	2,900,000	2,175,000	3,500,000	4,450,000
VII.—Cotton Goods ...	1,468,947	1,653,702	2,086,437	2,434,455
VIII.—Brewing	1,931,239	1,938,977	2,129,193	2,200,592
IX.—Whisky	2,299,964	1,739,979	2,045,300	2,050,199
X.—Woollens	1,247,285	1,347,768	1,700,374	1,679,411
XI.—Sheep	1,723,223	2,104,339	1,893,403	1,659,781
XII.—Horses	1,347,225	1,369,395	1,492,015	1,473,690
XIII.—Pigs	1,332,258	1,451,605	1,332,312	1,331,928
Total (above)	46,347,371	49,507,392	54,597,935	53,208,268
Other Exports	11,067,606	11,536,763	11,388,855	11,999,773
Total Exports	57,414,977	61,044,155	65,986,790	65,208,041

TABLE II—*continued.*

Exporting Industry (Order of 1913).	1912.	1913.	1914.	1915.
	£	£	£	£
I.—Linen	16,413,532	16,572,208	16,546,932	17,762,884
II.—Cattle	8,236,868	15,464,468	14,345,161	15,826,617
III.—Bacon	4,510,367	4,430,061	4,372,096	5,686,009
IV.—Poultry	4,007,693	4,048,088	4,487,326	6,223,905
V.—Butter	4,395,783	3,954,611	4,924,024	6,164,636
VI.—Steamers	3,361,500	3,148,000	6,703,250	4,721,500
VII.—Cotton Goods ...	2,664,984	2,722,350	2,275,174	2,519,523
VIII.—Brewing	2,379,855	2,554,044	2,756,363	2,817,640
IX.—Whisky	1,960,136	2,008,500	1,930,377	1,859,977
X.—Woollens	1,837,375	1,852,554	1,947,709	2,551,859
XI.—Sheep	1,877,674	1,784,142	1,915,711	1,860,438
XII.—Horses	1,627,040	1,703,260	1,431,045	1,121,520
XIII.—Pigs	1,302,053	1,024,197	736,688	1,172,139
Total (above)	54,624,860	61,246,483	64,371,856	70,288,647
Other Exports	12,557,118	12,639,927	12,939,196	14,174,761
Total Exports	67,181,978	73,886,410	77,311,052	84,463,408

compulsory tillage of Irish farms is being enforced as a war-time necessity, it may be useful to point out that the popular notion, that of Live Stock being the principal source of wealth to the Irish farmer, is a popular delusion. Even when tillage was at its lowest in Ireland the new wealth produced by Crops was always greater than the new wealth produced by the Live Stock industry. Take the year 1908, for which the " Output " of Irish Agriculture was specially calculated for the Census of Production. This calculation showed, in round figures, that the Crops of Ireland in that year produced value for 30 millions sterling; that 24 millions sterling was the value of those Crops which were fed to Live Stock on the farms—leaving 6 millions sterling for the " Output " as Crops merely. The same calculation showed that Live Stock produced in that year value for 41 millions sterling, of which nearly 1 million sterling was used on the farm, such as milk fed to calves, etc.—leaving 40 millions sterling for the " Output " as Live Stock merely. But 24 millions of Crops went to the producing of that Live Stock; in other words, the Live Stock business added another 16 millions sterling to this 24 millions sterling of Crops value. The figures for 1908, therefore, amount to this: that Tillage raised 30 millions sterling of new value and the Live Stock business added another 16 millions of new value to that; even in that year of low tillage, the new wealth produced by Crops was close on double the new wealth produced by Live Stock. That was the showing of the Census of Production in 1908.

C. H. OLDHAM

EXTRACTS FROM GERMAN PERIODICALS RELATING TO THE WAR.

THE best means of helping war-disabled soldiers is the subject of two articles in the *Graphische Presse* of March 15th and 22nd. Had the war been short, it is remarked, the kindness shown to men by their colleagues would have ensured that no wounded soldier was neglected; but in course of time sympathy becomes blunted, and men have too many hardships and sorrows of their own to be able to feel, as they once did, for those of others. There is reason to fear that employers under pretext of charity will avail themselves of the presence in great numbers on the labour market of wounded soldiers in order to lower wages generally. Associations are being formed under the auspices of the trade unions to afford legal advice and other kinds of help to the disabled.

A memorial addressed by the German National Association of Commercial Employees to the German legislative bodies contains suggestions for increasing the numbers and improving the quality of the population. The shrinkage of the birthrate should be combated by a grant of "maternity aid." The war has made the grant of such aid a necessity. Without this grant many children would be lost to the country, since the wives of soldiers find the allowance made them by the State and the Commune insufficient to pay the costs attendant on confinement. The advantages of this aid are so obvious that it ought certainly to be continued into the peace period. The fund from which the aid is given should be raised by contributions from each family, supplemented by additions from the State. Every female, so soon as she has reached the age of 16, should be compelled to contribute to this fund until she passes the age of child-bearing. This contribution should be graduated according to income. The relief, too, is to be graduated according to income, and according to the number of children already in the family. If, besides the newborn child, there are no other children, maternity aid is to be granted when the yearly income is less than Mk.3,000 (£120). For every fresh child the limit of income is raised by Mk.250. Families with more than Mk.5,000 yearly do not receive any aid. The maternity aid will be granted equally to unmarried mothers. The memorial also contains recommendations for the education of women which may thus be summarised :—The profession of wife and mother is to form the central point of all the education and training of young women. All girls between 14 and 18 years of age are to be compelled to attend a course of household

instruction at the continuation school. Professional instruction for gaining a livelihood is not to be obligatory, but voluntary, and no inducements are to be held out to girls by authorities or public bodies to take this voluntary course. Families would be provided with suitable homes by regulations such as the following:—The Bundesrat should take steps to introduce without delay a system of Imperial Housing Insurance, in connection with the insurance of employees. The funds for this insurance shall be raised by the obligatory contributions of unmarried insured persons and insured childless married couples, which contributions the employer shall share. Housing allowances shall be granted to insured persons on and after the birth of a third child, each succeeding child entitling to an additional grant. The housing allowance may be transmuted into a capital sum for the object of acquiring a home.

In the *Norddeutsche Allgemeine Zeitung* (April 10th) Dr. Schulte argues that emigration after the war—especially to countries which have been at war with Germany—should be discouraged. Whereas through emigration the percentage of those requiring support at home compared with that of those who are able-bodied becomes less favourable, emigrants should be made liable for the expense that each has cost the State, and thus contribute towards supporting those left at home who are unable to work. The Government is also interested in seeing that prospective emigrants go to a suitable climate, so that they do not lose their health and return to their Fatherland only to be a burden to it.

In the *Konfektionär* (April 18th) it is maintained that Germany must demand a war indemnity in the shape of raw materials—from America in particular. Professor Wohltmann, manager of the Agricultural Institute at Halle University, after reviewing in detail the possibilities of various agricultural products from abroad, concludes:—Germany, then, is faced by the danger of becoming once again a more or less agrarian State, and can only be saved from that fate by a victorious peace, which would make it possible for her to draw the necessary raw materials in sufficient quantities from her own colonies and other overseas districts.

In the *Wirtschaftszeitung der Zentralmächte* (March 22nd) Dr. Uetrecht argues that in view of the inevitable economic war it will be necessary for Germany to "penetrate" economically the countries accessible to her—the Balkans, Black Sea districts, Caucasia, Persia. It will be necessary to create economic pioneers—

business men of all sorts—who will have every facility given them to go Eastwards and purchase raw materials; they must be encouraged and financed. Money must not be allowed to go over the Rhine to Western countries. Under proper organisation the Black Sea States will furnish Germany with their surplus corn and cattle. Textiles, leather, ores, timber, oil can be imported and potash exported to the Balkans, the Ukraine, etc., instead of to America. The first essential for German trade prosperity is independence.

The *Pester Lloyd* (April 18th) anticipates a great development of German trade with Russia. The whole production of Russian industries, as compared with peace time, has fallen to about 5 per cent. The production of raw materials and half-finished goods in the heavier industry has decreased to a minimum, for which the shortage of coal is mainly responsible. Sugar production has fallen from Pud 100 mill. to Pud 40 mill., and next year will hardly exceed Pud 20 mill. The chemical industry is almost at a standstill, and the once famous chocolate and confectionery are no longer made. There is, in fact, a shortage of everything in Russia, and it is necessary to make it possible for far more goods to be imported than heretofore. There is a dearth of coal, zinc, manganese, silicon, wolfram, leather, graphite, girders, rails, wire of all kinds, cement, bricks, belting, ropes, valuable lubricants, stuffing, packing, industrial materials, planes, milling machines, tools, files, hammers, pickaxes. Germany and Austria-Hungary are given a great and new field for exports, especially for agricultural implements, *e.g.*, plough-shares, scythes, sickles, etc.

In the *Welthandel* (April 15th) Dr. Weber, a functionary of the Imperial Economy Office, develops a scheme for creating economic offices for the various branches of industry which are to be formed from the representatives of trade, industry and handicrafts concerned. Their main task will be the rationing of the various business concerns when raw materials are given out and the distribution of the masses of supplies of all kinds set free by the military authorities, for it is of the utmost importance that delivery should be made to all works alike, that no preference should be shown to the larger concerns, and that those business establishments that have been closed down should be able to resume working as soon as possible. Assurances have already been given from official sources that trade will be completely restored to its old activities. There is to be no notion of centralisation, but each individual will be free to make his

purchases himself. But at the same time, Dr. Weber argues, a certain measure of control is inevitable, having regard to the exchange and the urgency of the demand. It is essential that trade should be at liberty to make advance purchases in foreign countries so far as this is possible on credit. The Imperial Economy Office, says Dr. Weber, gives the assurance that in case it should be necessary later on to confiscate these advance purchases every possible regard will be paid to the interests of the purchasers, and that they will be repaid in full the original outlay, together with all expenses, and will be given a bonus corresponding to the risks they have incurred.

Plutus for March 27th contains a severe criticism of a plan proposed by D. A. Schleimer for paying off the German war debt, the interest on which he reckons at Mk.5 milliards (£250 millions). A new War Debt Redemption Office is to be empowered to buy back the war loans and to issue war debt loans, for use within the Empire, to the amount of the redeemable war loans. They will count as legal tender within the German Empire and Colonies. The war loans will be bought back with this new money. The previous holders can invest as they wish the capital returned to them in this legal currency. The State then has no further interest to pay. The writer in *Plutus* estimates the annual charge of the debt plus pensions as Mk.14 milliards (£700 millions), imputes to Schleimer a confusion between capital and money, and concludes that the interest on the war debt must be paid in the traditional way.

Official Papers

Third Report of the Central Control Board (Liquor Traffic). [Cd. 8558.] 3*d.* The decrease in convictions for drunkenness, not only of men—which might have been attributed to the withdrawal of men for [illegible] Army—but also of women, testifies to the beneficial effect of th[illegible]d's work, which is reviewed in detail.

[illegible]ird Annual Report of the Registrar-General for Ireland. [Cd. [illegible] The marriage rate, 5·13 per 1,000 of population, for 1916 [illegible] the average of the decade 1906–1915. The birth-rate, 2[illegible]00 and the death-rate 16·46, were also each below the co[illegible]ding average for the previous decade.

Census of England and Wales. Vol. XIII. "Fertility of Marriage." [Cd. 8678.] 1917. 4*s.* The volume contains only tables, the interpretation of which is deferred till after the war.

Tables relating to the Trade of British India with the British

Empire and Foreign Countries, 1911–12 *to* 1915–16. [Cd. 8910.] An abstract of the annual statements issued in India.

Statistical Tables relating to Banks in India. (No. 461.) The third issue of the series.

Final Report of the Committee on Commercial and Industrial Policy after the War. [Cd. 9035.] 9*d.* Recapitulating interim reports, the Committee make numerous recommendations, of which only a few compressed specimens can be noticed here. The present prohibition of imports from enemy countries should be continued for at least twelve months after the war. As to the supply of cotton and other materials, it is advisable that the Empire should be capable in an emergency of being self-sufficient. Aliens are to be admitted to do business in this country (with some precautions). Combinations among manufacturers are approved of, and should be legalised. The control of capital issues should be relaxed after the war. Saving should be promoted by taxation of wasteful consumption. The income-tax requires to be reformed. "Dumping" must be prevented, possibly by measures like those enacted by Canada, and, recently, the United States. Alive to the importance of not discouraging British exports by increasing the cost of imported materials, the Committee would confine protection by means of Customs duties to (1) "key" or "pivotal" industries; and (2) some others essential to economic strength. Such protection is not to be accorded until after a searching examination by a competent and independent authority; for the constitution of which suggestions are offered. Preferential treatment should be accorded to the Overseas Dominions and Possessions in respect of any Customs duties now or hereafter to be imposed in the United Kingdom. Many of the conclusions are *negative*; for instance, *against* an Imperial Development Board, an Imperial Bank of Industry, a comprehensive tariff scheme covering all imports, the metric system, and decimal coinage.

OBITUARY—LORD COURTNEY OF PENWITH

THE Royal Economic Society has to lament the loss [illegible] one of its Vice-Presidents by the death of Lord Courtney [illegible]h, 1918, in his eighty-sixth year.

Born at Penzance on July 6th, 1832, Leonard H[illegible] Courtney became a scholar of St. John's College, Cambrid[illegible]51, was Second Wrangler and bracketed equal with the Sen[illegible]ngler as Smith's Prizeman in 1855, a Fellow of his College in 1856, joined the staff of *The Times*, and sat for twenty-four years, from 1876, in the House of Commons as Member for Liskeard until 1885, and then for the larger constituency of Bodmin in which Liskeard

had been merged. He was in turn Under-Secretary for the Home Department, for the Colonies, Financial Secretary to the Treasury, and Deputy Speaker of the House of Commons, and was created a peer in 1913.

This is not the place in which to discuss his political views and career, or his volume on *The Working Constitution of the United Kingdom and its Outgrowths*, 1901, but mention should be made of his services on the Royal Commissions on Labour, Indian Expenditure, the Amalgamation of the City and County of London, Lighthouse Dues, and Gold and Silver, on which his economic studies stood him in good stead.

In 1860 he published a pamphlet on *Direct Taxation* in which he severely criticised Babbage, G. W. Hemming, John Stuart Mill, and John Bright, and maintained that capitalisation of the value of property was the only just and practicable method of assessment for direct taxation. In 1868 he read a paper on the *Finances of the United States*, 1861-67, before the Royal Statistical Society, of which he subsequently became President. For a brief interval (1872-75) he filled the Chair of Political Economy at University College, succeeding his friend Cairns, and preceding Jevons. He contributed the section on Finance to Mr. Humphry Ward's *Reign of Queen Victoria*, 1887, and supported the cause of international bimetallism by speech and pen. His interest in economics was maintained to the end. The Political Economy Club had few more faithful members. Elected in 1869, he was the *doyen* of the Club at the time of his death. It is, perhaps, pardonable to quote from the diary of Henry Sidgwick under the date of March, 1885, " Went up yesterday to the Political Economy Club. . . . Thorold Rogers knows a little and thinks he knows all there is to be known. Courtney knows a good deal in his old-fashioned style and must be confirmed in his economic orthodoxy by his justifiable consciousness of his superiority to almost everyone else there." Of late years he intervened less frequently in discussion, but never failed to show the clear, logical, impartial and independent judgment which was one of his strong characteristics.

Those who knew Lord Courtney well loved and admired him most. From the frailties and follies of human nature he seemed immune, and with his unswerving devotion to the truth as he saw it he neither suffered fools gladly nor allowed personal loyalty to bias his opinion. It was perhaps characteristic of a Philosophical Radical who had known Babbage, and John Mill, and Macaulay, and other infant prodigies of the Victorian age, that he asked

me in my twelfth year whether I had begun to study Political Economy—a question which made me resolve to do so in later life. The charge of insularity which is (or was) levelled against the Englishman is intensified in the peninsularity of the natives of Cornwall. Lord Courtney was so devoted to his county that his nearest friend once interrupted us in a conversation with: "I know what you two are saying—'I am a Cornishman. Thou art a Cornishman. He is *not* a Cornishman!'" Let his elegy be: The last great Cornishman is low.

Lord Courtney married in April, 1883, Miss Catherine Potter, a sister of Mrs. Sidney Webb. Lady Courtney's interest in the dwellings of the poor and in other social problems contributed to make her an invaluable helpmeet to one whose fortitude shone the more under the affliction of partial blindness which he bore with the bravery of his friend Fawcett, and which he did not allow to prevent him from keeping abreast with the life of the day in literature, art, and politics. His funeral oration over Herbert Spencer might well be spoken anew of himself. Unlike Spencer he had a saving sense of humour and a vein of tenderness. He lived a full and fruitful and inspiring life. In a letter to me shortly before his death he described himself as "a lagging veteran." But the end, when it came, was all too sudden. We have lost a great-minded and great-hearted man.

HENRY HIGGS

CURRENT TOPICS.

THE following have been elected to membership of the Royal Economic Society:—

Beltran, P. G.
Boag, H.
Carter, S.
Cravath, P. D.
Croll, G. (life).
Datta, S.
Edmonds, J
Edwards, J. P.
Eybers, G. van W.
Gay, Jules.
Grant, J. C.
Inouye, S.
James, A.
Johnson, Capt. G. B.
Mookerjee, N. N.
National Bank of Commerce, New York.
Nelson, C. H.
Rushforth, F. V. (life).
Seeger, L.
Shields, B. F.
Smallwood, R. C.
Smith, A. D.
Springer, L.
Thompson, W. H. N.
Troy, M. P.
Ward, J. S. M.
Welch, H. J.

The following have been admitted to library membership:—

University College Library, Cork; Forman Christian College Library, Lahore; Ministry of Commerce Library, Paris.

THE Society's Annual Meeting was held at 9, Adelphi Terrace, at 2.30 p.m. on Wednesday, May 15th, the Treasurer, Mr. Alfred Hoare, being in the Chair. The accounts submitted for the year 1917 showed a surplus of income over expenditure amounting to £315 as compared with £365 in the previous year. The Secretary's Report showed that fifty-two new Fellows were elected during the year against forty-three lost by death, resignation, or default, the number of Fellows and Library Members on December 31st, 1917, being 799.

THE Industrial (War Inquiries) Branch of the Board of Trade is from henceforth to be merged in the new General Economic Department of the Board of Trade, except so far as statistical work is transferred to the Statistical Department of the Industrial (War Inquiries) Branch. Dr. Clapham is Deputy Director, and he has arranged to give the whole of his time to this and his other duties at the Board of Trade until the end of the war. Professor Pigou is also engaged for a large part of his time on special work in the same office. All economists will welcome the establishment at the Board of Trade of the General Economic Department, which has been placed in charge of Professor Chapman, who has resigned his Chair at the University of Manchester to take up his new duties. The new department was thus referred to in the official paper describing the reorganisation of the Board of Trade:—

"In addition to the above departments charged with dealing with special groups of subjects, a new and important section will be created under the title of 'General Economic Department' for the purpose of assisting the Permanent Secretary in relation to questions involving economic policy, especially those which, owing to their generality or novelty, extend beyond the sphere of any special department. In the near future it is certain that questions of this nature, often of the greatest importance, will continually arise and need careful watching and handling, especially in their earlier stages. The new section will supply the necessary organisation for this purpose. It will (*inter alia*) take over any of the duties of the temporary 'Industrial (War Inquiries) Branch'

of the Board of Trade which are not transferred to the Statistical Department. The section will have no executive functions but will be charged with the duty of systematically studying the general economic position of the country and the problems arising therefrom."

THE Chancellor of the Exchequer announced on March 21st, 1918, that he had appointed a Committee with the following terms of reference :—To inquire into and report upon : (1) the actual increase since June, 1914, in the cost of living to the working classes, and (2) any counterbalancing factors (apart from increases of wages) which may have arisen under war conditions. The Committee is constituted as follows :—Lord Sumner (Chairman), Professor Sir William Ashley, Professor A. L. Bowley, Mr. W. Coggan, Mrs Knowles, D.Litt., Mr. J. J. Mallon, Mrs. Pember Reeves, Mr. Newton E. Smith. Mr. J. S. Eagles (Latymer House, Piccadilly) is acting as secretary. The appointment of this Committee is in accordance with the Second Report of the Select Committee on National Expenditure (ordered to be printed December 13th, 1917). That Report devoted considerable attention (§§ 16-33) to the relations between expenditure and prices; expressed the opinion that " the extent to which the cost of living has in fact increased does not appear to have been ascertained with any certainty "; and definitely recommended that an inquiry should be set on foot of the scope now indicated in the new Treasury Committee's terms of reference.

IT was announced on April 3rd, 1918, that the Agricultural Wages Board had appointed a Committee to inquire into the financial results of farming and market gardening, and the cost of living as affecting rural workers, under present conditions. It consists of six members of the Wages Board :—Sir Henry Rew (Chairman), Mr. George Dallas, Mr. F. W. Neame, Mr. C. S. Orwin, Mr. R. R. Robbins, Mr. R. B. Walker; and of three co-opted members :—Professor Sir William Ashley, Mr. W. Gillies, Statistical Secretary to the Labour Party, Professor W. Somerville, Professor of Rural Economy in the University of Oxford.

Mr. A. W. Ashby and Captain Proby will act as joint secretaries (Agricultural Wages Board, 80, Pall Mall, London, W.1).

PROFESSOR SIR WILLIAM ASHLEY writes :—"A decision has recently been arrived at by the University of Birmingham which may prove of considerable importance. It is to establish a new B.A. degree for students who desire to make a special study of Social and Political Science. Such students, having passed the intermediate examination will be allowed to select their second and third-year courses for the degree of B.A. so as to include as principal subjects (studied for two years) Moral, Social, and Political Philosophy and Economics. As subsidiary subjects (studied for one year) they must offer British Institutions and two of the following :—General European History, Methods of Statistics and Industrial Law (as one subject), English Literature, French, German, and the History of Education. The requirements for the degree have been planned so as to make it suitable for those who wish simply to fit themselves for the duties of political life, and for an active share in local administration. It is hoped, also, that the degree will be attractive to many of those who look forward to careers as teachers; as a means of fitting themselves to give that instruction in the duties of citizenship which is sure to be called for in our schools when continuation courses have become compulsory. Moreover, the degree will be very suitable for those who wish to prepare themselves for 'social work' of a professional character. Nothing could be more appropriate for those who hope to become factory inspectors, municipal officials, welfare supervisors, Employment Exchange officers, and the like, than the B.A. in Social and Political Science, followed by a year of the practical training already organised by the University in connection with its Social Study Diploma."

THE Society's Correspondent in South Africa writes to the Editor as follows :—

"SIR,—Everyone who attempts to deal with the economic future is bound to take into account the probable rate of interest: there is, perhaps, no single factor of so great importance. For instance, Mr. Bickerdike, in his instructive article on British agriculture, gives due weight to it. But sound as is his reasoning, his conclusions—or anyone else's—are liable to be entirely falsified owing to the uncertainty of one premiss. He suggests that a bad exchange situation will arise owing to excessive importation, leading to a long-continued high bank-rate, and a slump in trade.

"But it all depends on a factor that is not so much economic as psychological. Will the public continue to economise? At present

they are saving far more than before the war; not enough, perhaps, but still it must be nearly three times as much, in terms of money, to lend to the Government as they are doing. Instead of the estimated £m400 of peace-time saving, there would now be at least £m1,000 if it were not being blown away in gunpowder. If after the war this rate of saving were maintained there would be abundance of floating capital, the shortage of ships, railway plant, and houses would soon be made up, and difficulties would disappear like magic. But if the rate of saving drops to the old level or below it, then the worst forecasts of bad trade and industrial troubles are likely to be verified.

"Of course, the situation will depend on the action of the whole world in this matter, but England, next to America, is still the most important country. What are the people likely to do? Living far away as I do I cannot even form an opinion. It would be most interesting if some of your readers would discuss the point. The only contribution I can make is to say that in the unimportant Colony of South Africa prosperity is so great, on account of the war, that accumulation is rapid, and the rate of interest rather lower than in England just now, and there seems no reason why this state of things should not continue for some time after the war.

"R. A. LEHFELDT."

Johannesburg, February, 1918.

ECONOMISTS, especially those who cultivate the science of wealth for the sake of its bearing upon human welfare, have suffered a heavy loss by the death of Sidney Ball. We have unfortunately been unable to prepare an adequate description of Ball's varied economic activities in time for insertion in the present number of the ECONOMIC JOURNAL. We may at least recall gratefully his services to the JOURNAL. The reviews with which he enriched our pages and those of the *Economic Review* form part of his claim to be remembered. In these critical writings he sometimes allows to appear, incidentally and unobtrusively, views of his own more valuable than the opinions which he lucidly analyses. Thus, Sorel's doctrine of violence (reviewed 1916) seems rather futile; while Ball's criticism teaches a lesson needed by economic controversialists that there may be a "soul of goodness" in tenets that are *primâ facie* absurd. Blind defiance of economic reasoning was no part of the Socialism which Ball ardently advocated. Rather he agreed with Loria that "Sociology can only exist and can

only attain to the dignity of an exact science by taking as its point of departure the analysis of the economic fact." As showing his appreciation of abstract reasoning, with some doubt as to its usefulness, or at least as to the utility of its last refinements, his remarkable review (in the *Economic Review*) of Professor Pigou's *Wealth and Welfare* may be mentioned. Stimulating as were Ball's writings on economic topics, he exercised an even more useful influence as a teacher, and as the promoter of various institutions directed to the increase of social welfare. The first meeting for the formation of Toynbee Hall was held in Ball's rooms; likewise the first meeting for the formation of Barnett House. Ruskin College, too, is much indebted to his fostering care. Most truly has the Chancellor of the University of Oxford written, in the course of an appreciative tribute to the memory of Sidney Ball : " There was no good cause in the University with which he was not identified, no reasonable and liberal aspiration which he did not labour to promote." To cite another authoritative witness, one who enjoyed the friendship of Ball from undergraduate days, and now writes of his lost friend (in the *Oxford Magazine*, over the unmistakable initials " L.R.P.") :—" The first years after his degree were spent almost entirely in arduous original study, both of metaphysics and of economics. Soon after he began his career as Fellow of St. John's he felt the attractions of the Socialist movement, and his centre of gravity shifted somewhat from the purely theoretic to the more practical speculation and thought. His wide study and observation of social life and problems convinced him of the weakness and dangers latent in much of our social structure; also his deep human sympathies impelled him towards the main movements of educational philanthropy."

RECENT PERIODICALS AND NEW BOOKS.

Journal of the Royal Statistical Society.

MARCH, 1918. *Urban Housing Problems.* J. CALVERT SPENSLEY. The decline in the rate of building and the cause thereof, the growth of population, the provision of housing after the war, and other aspects of the subject, are considered in the paper and the subsequent discussions. *The War Statistics of Poland and Lithuania.* GEOFFREY DRAGE. An exhaustive demographic study. *Mathematical Representation of Statistics.* Prof. F. Y. EDGEWORTH. A reply to criticisms. *Wholesale Prices of Commodities.* EDITOR of *The Statist.* The Sauerbeck index number for 1917 was 174, relative to the period 1867–77. (The corresponding figure for each of the years 1912, 1913, 1914 was 85.)

The Nineteenth Century.

MARCH, 1918. *Capital and General Progress.* W. H. MALLOCK. With reference to Lord Leverhulme's optimistic statements in *The Observer* of January 20th, 1918, reforms required for realising his hopes are proposed. *The Past and Future of Railways.* J. H. BALFOUR-BROWNE. Referring to the evils of the competitive past, the writer advocates the purchase—but not the operation—of railways by the State.

APRIL, 1918. *Coal, Iron, and the Domination of the World.* J. ELLIS BARKER. The connection between the two minerals and domination is illustrated by statistics. *The Revival of Village Social Life.* VISCOUNTESS BARRINGTON.

MAY. *Britain's True Wealth and the Unimportance of War Debt.* J. ELLIS BARKER. "The riches of the British Empire are gigantic beyond all conceptions, and are absolutely unfathomable." *Food Money.* FRANK MORRIS. Rationing the amount of money spent on food, rather than the amounts of each food, is advocated as affording among other advantages greater freedom of choice, encouragement of production, and discouragement of maximum prices. *Co-partnership* versus *Labour Unrest.* NEVILLE PRIESTLEY (Managing Director of the South Indian Railway Company).

Contemporary Review.

MARCH, 1918. *A Levy on Capital after the War.* F. W. PETHICK LAWRENCE. The revenue required being at least £700,000,000, and the revenue obtainable from taxation at present rates, with-

out the excess profits tax, £420,000,000, the gap had best be filled by a levy on capital of three classes: (1) Desired by the State for other reasons—*e.g.*, perhaps railways; (2) held by the State for the sake of income—*e.g.*, trustee securities; (3) accepted as security for ultimate payment in other ways. A suggested graduation from 1 per cent. to 11 per cent. would bring in about £900,000,000. To pay off the whole debt the percentages would have to be multiplied by seven.

APRIL, 1918. *The Deficit Ahead.* SIR CHARLES MALLET. A levy on capital would discourage saving, and, unless exceeding 10 per cent., would only extinguish a fourth part of the debt. "It might leave us with a 7*s.* 6*d.* income tax, and an uneasy feeling that it had not been worth while." *Sinn Fein and Labour in Ireland.* MICHAEL MACDONAGH.

The Fortnightly Review.

APRIL, 1918. *Women and the Civil Service.* ELIZABETH S. HALDANE. *Agriculture after the War.* E. UPSON. With special reference to discharged soldiers, small holdings are advocated on grounds of social welfare as well as economic progress.

MAY. *Profiteering.* J. H. BALFOUR-BROWNE, K.C. The enterprise of the adventurer—well distinguished from interest and the wages of superintendence—is a requisite for production. Like copyright and patent laws, profits are necessary, but should be limited.

Better Business (Dublin).

FEBRUARY, 1918. *Report of a Bacteriological Investigation of the City of Dublin Milk Supply.* DR. HOUSTON. The greater part of the supply is found to fall short of a reasonable standard of purity. *Farmers' Associations.* J. E. GEOGHEGAN. *Agricultural Traders.* R. N. TWEEDY. *Hodgson Pratt and his Memorial.* J. J. DENT. An account of the philanthropic co-operator and of the Society, which, in memory of Hodgson Pratt, provides for essay prizes, travelling scholarships, and like purposes. *Labour Conditions in Dublin and the Coming Revolution.* I. That the conditions are alarming is established by instances of budgets compiled by the Leo Guild in the spring of 1917 for families and women working independently, with reference to the cost of living. While £2 would be required for a married man with three children to live healthily, the average for four families of that size was only 30*s.* 3*d.* The average income of working women is appallingly small.

Indian Journal of Economics (Allahabad).

JANUARY, 1918. *The Art of Economic Development.* Part I. H. STANLEY JEVONS. *The Study of Rural Economics in South India.* GILBERT SLATER. *The Relation between Interest and Discount.* D. A. BARKER.

Quarterly Journal of Economics (Cambridge, Mass.).

FEBRUARY, 1918. *The Fertiliser Needs of the United States.* H. J. WHEELER. *The Government and the Newsprint Paper Manu-*

facturers. E. O. MERCHANT. *Our Large Change.* The denomination of the currency. E. E. AGGER. *The Founders, the Molders, and the Molding Machine.* MARGARET L. STECKER. *French Railway War Finance.* S. E. HOWARD. *Labour Problems in the United States during the War.* L. B. WEHLE.

The American Economic Review (Cambridge, Mass.).

MARCH, 1918. *State Market Commission of California.* CARL PLEHN. *Price Maintenance.* H. R. TOSDAL. *The Overdraft Evil.* N. R. WHITNEY. *Government Control of the Wheat Trade in the United States.* W. M. DUFFUS. *Mandeville in the Twentieth Century.* S. N. PATTENS. The views of Prof. Seligman and others upon war finance are controverted.

A *Supplement* to the Review contains the Proceedings of the Thirteenth Annual Meeting of the American Economic Association (December, 1917). Among the subjects discussed thereat were taxes upon incomes and excess profits, the future of international law, employment and the war, money and prices with reference to war finance (papers read by Prof. B. M. Anderson, who advocated price-fixing, and by Prof. Irving Fisher).

Political Science Quarterly (New York).

MARCH, 1918. *The War Revenue Act.* E. R. A. SELIGMAN. The Act of October 3rd, 1917, which added at a stroke over two and a half billions (£500,000,000) to the revenue, is examined and found to possess some removable defects along with lasting advantages.

Journal of Political Economy (Chicago).

JANUARY, 1918. *Economics and Modern Psychology.* I. J. M. CLARK. *The Price System and Social Policy.* W. H. HAMILTON. *The Function of Economic Theory.* C. E. AYRES.

FEBRUARY, 1918. *Export Trade Problems.* W. NOTZ. *The War's Effect on English Trade Unions.* O. TEAD. *Economics and Modern Psychology.* II. J. M. CLARK. *The Economic Function of Common Law.* HOMER HOYT.

MARCH. *The Place of Value Theory in Economics.* W. H. HAMILTON. *The Waiting Period in American Compensation Acts.* I. M. RUBINOW. *Mechanical Evolution and Changing Labour Types.* C. REITELL. *The Transcontinental Rate Structure.* PAUL D. CONVERSE.

The Annals of the American Academy of Political and Social Science (Philadelphia).

MARCH, 1918. This number is devoted to *War Adjustments in Railroad Regulation.*

Bureau of Labour Statistics (Washington).

Among recent publications may be noticed *Wages and Hours of Labour in the Iron and Steel Industry* (October, 1917), *Retail*

Prices from 1907 *to December,* 1916 (November, 1917), and a corresponding volume on *Wholesale Prices.* The *Monthly Review* continues to form a useful guide and companion to the publications of the Bureau.

Journal des Economistes (Paris).

JANUARY, 1918. *Le Marché Douanier en* 1917. A. RAFFALOVICH. *Les nouvelles dispositions budgétaires pour* 1918. E. FALCK. *Les Caisses d'Epargne et la Guerre.* G. DE NOUVRON.

FEBRUARY. *L'Année économique et financière en Autriche.* A. RAFFALOVICH. *L'Industrie textile française pendant la Guerre.* A. PAWLOWSKI. *Le nationalisme économique en Espagne.* R. MARVAUD.

MARCH. *La Banque d'Angleterre.* A. RAFFALOVICH. *Le Budget des Services Civils de l'Exercice* 1918. E. FALCK. *La Concurrence Internationale et la Guerre.* FERNAND-FACQ.

APRIL. *Projets de réorganization économique de la France.* YVES GUYOT. *Le prochain Budget britannique,* 1918. W. M. J. WILLIAMS. *L'enquête parlementaire sur les dépenses publiques en Angleterre.* A. RAFFALOVICH.

L'Economiste Français (Paris).

M. Edouard Payen continues his interesting series of studies on important articles of commerce. Those recently noticed present in general the common attribute of rise in price and shortage of supply. For instance, the European supply of raw *silk* has fallen off since 1915, while the price has been more than doubled. To that rise there contribute the cost of transportation and the distraction of foreign exchanges—a variety of factors not encouraging to those who think it a simple matter to fix prices by decree. The high price would probably have checked the demand for silk, but that it has been wanted as a substitute for wool and cotton. The price of *cotton,* too, is about double what it was before the war. The author does not connect the general rise of prices with conditions affecting the supply of money. He simply records that the production of *gold,* which reached its highest point, in value about £94,000,000, was less in 1917 by more than two million ounces. Among other metals may be mentioned *platinum,* of which the price has more than doubled since 1914. In the use of the metal for ornament, the high price has acted rather as a spur than a check to consumption, owing to the kind of "snobisme" which prefers expensive jewellery. The troubles of Russia have greatly restricted the production of platinum. The supply of *manganese,* so important in the manufacture of steel, is, fortunately, more diversified. The record in respect of high prices seems to belong to *paper,* and the materials from which it is made. Recent prices for ten different kinds of paper in France—*papier de journal, papier à écrire,* etc.—compared with mean prices before the war, show on an average (the median) a rise of 500 per cent. The price of printing paper in England has trebled.

Le Musée Social (Paris).

JANUARY, 1918. *La guerre et la repopulation.* J. COURMONT. The retardation of the French population in comparison with other nations is exhibited statistically; and the "science of puericulture" is prescribed among remedies.

De Economist (La Hague).

FEBRUARY AND MARCH, 1918. These numbers are largely concerned with monetary questions. The views of Dr. VERRIJN STUART concerning the future of gold expressed in a recent discourse are summarised by Dr. H. BORDEWIJK. Dr. VERRIJN STUART himself contributes an elaborate appreciation of the new theory of money contained in Liefmann's *Geld und Gold*, approving that author's dissent from the quantity theory, and some but not all of his other views. G. M. BOISSEVAIN also contributes an article on the theory of money.

Jahrbücher für Nationalökonomie und Statistik (Jena).

JANUARY, 1918. *Die soziale Theorie der Verteilung und des Wertes.* I. R. STOLZMANN. Referring specially to M. Tugan-Baranowsky's *Theorie der Verteilung* (1913) and Liefmann's *Wirtschaftlehre* (1917). *Die öffentliche Ernährungswirtschaft.* Dr. WILLY KREBS.

FEBRUARY. *Die Soziale Theorie,* II. R. STOLZMANN. *Die Kriegsanleihen Deutschlands and Oesterreich-Ungarns,* II. H. KÖPPE.

Giornale degli Economisti (Rome).

FEBRUARY, 1918. *Teoria dell' ammortamento dell' imposte.* B. GRIZIOTTI. *I problemi economici del dopo-guerra in Sardegna.* M. VINELLI.

MARCH. *La reazione contra il militarismo economico in Germania.* C. BRESCIANI-TURRONI. *Riforma monetaria di guerra.* B. STERPONI.

La Riforma Sociale (Turin).

JANUARY AND FEBRUARY, 1918: *"Ciò che non si vede" del costo della guerra.* G. PRATO. The arguments of the paper read before the Turin Academy of Sciences, which is summarised in THE ECONOMIC JOURNAL for 1917, p. 585, recur here. *Corso dei Cambi, Sbilancio Commerciale e Circulazione Cartacea.*

NEW BOOKS.

English.

D'ACOSTA (URIEL). Peace Problems in Economics and Finance. London: Routledge. Pp. xvi + 165. 2*s.* 6*d.* net.

Alcohol: Its Action on the Human Organism. London: Stationery Office. 2*s.* 6*d.* net.

[This impartial inquiry shows that we know very little as to the effect on the human organism of alcoholic drinks taken in moderate quantities and of usual strength.]

BENTINCK (LORD HENRY). Industrial Fatigue. London: King. 1918. Pp. 43.

[The observations obtained by the Committee on the Health of Munition Workers as to the relation between hours of work and output, together with some earlier experiences, are lucidly presented.]

CARTER (REV. HENRY). The Control of the Drink Trade. A Contribution to National Efficiency. With a Preface by Lord D'Abernon. London: Longmans. 1918. 7*s*. 6*d*. net.

[A description and favourable estimate of the action of the Central Control Board.]

CHAPMAN (S. J.). Labour and Capital after the War. A series of essays (by several writers). Edited by S. J. Chapman. London: Murray, 1918. Pp. 280.

[To be reviewed.]

Cities Committee of the Sociological Society. Papers for the Present. (1) The Modern Midas. (2) The Banker's Part in Reconstruction. London: Headley. Pp. 16 and 36. 6*d*. (each paper).

[The outcome of a Committee whose purposes are, *inter alia*, to "raise the life-standard of the people and the thought-standard of schools and universities"; to regulate "the present unacknowledged use of public credit by bankers," and subordinate it to "the new communitary uses"; to make "individuals more socialised and communities more individualised."]

EVANS (RICHARDSON). The Conditions of Social Well-being Considered in the Light of the War. Wimbledon: Trim. 1917. Pp. 46.

FORREST (REV. J. R. C.). The Agricultural Labourer and the Minimum Wage. With a preface by the Bishop of Oxford. Reprinted from "The Commonwealth." Letchworth: Wardman. Pp. 15.

[A claim for an increase of the present minimum wage, 25*s*., the inadequacy of which, at present prices, is shown by a family budget which the writer has verified.]

JENNINGS (H. J.). The Coming Economic Crisis. London: Hutchinson. Pp. 136. 3*s*. 6*d*. net.

[Reproduced in part from the *Quarterly Review* and other periodicals.]

MACARA (SIR CHARLES). Capital and Labour. Ashton-under-Lyne: Cotton Factory Times. Pp. 12.

[A series of articles on Conscription of Wealth, Industrial Reconstruction, etc. Reviewed above.]

New Towns after the War. An Argument for Garden Cities. By New Townsmen. London: Dent. 1918. Pp. 84.

RADFORD (GEORGE). Our Daily Bread. London: Constable. Pp. 127.

[By the Editor of *Our Land*.]

ROBERTSON (RIGHT HON. J. M., M.P.). The Economics of Progress. London: Fisher Unwin. Pp. 298.

[To be reviewed.]

UNWIN (GEORGE). Finance and Trade under Edward III. Manchester: University Press. 1918. Pp. 360.

[To be reviewed.]

WALTON (CECIL). The Great Debenture, or the Passing of the National Unrest. Glasgow: Maclure. 1918. Pp. 71. 1*s*. 2*d*. net.

[A collection of papers dealing with co-ordination of economic factors and kindred topics.]

ZIMMERN (A. E.). The Economic Weapon in the War against Germany. London: Allen and Unwin. 1918. Pp. 20.

[From evidence as to the state of siege to which Germany has been subjected it is concluded that the economic weapon is the most powerful in the armoury of the Allies.]

American.

BABCOCK (MAJOR-GENERAL G.). The Taylor System in Franklin Management. Application and Results. New York. 1918. Engineering Magazine Co. $3.

CUMBERLAND (W. W.). Co-operative Marketing. Princeton: University Press. 1917. Pp. 226.

Economics, Teaching of, in Harvard University. Report presented by the division of education at the request of the Department of Economics. Cambridge, Mass.: University Press. 1917. Pp. 248.

GILBRETH (FRANK B. AND L. M.). Applied Motion Study. A collection of papers on the efficient method to industrial preparedness. London: Routledge. 1918. Pp. xviii + 220. 6*s*. net.

KEMMERER (E. W.). Postal Savings. An historical and critical study of the postal saving bank system of the United States. Princeton: University Press. (London: Oxford University Press.) 1917. Pp. 176. 5*s*. 6*d*. net.

LUTZ (H. L.). The State Tax Commission of the Development and Results of State Control over the Assessment of Property for Taxation. (Harvard Economic Studies, Vol. XVII.) Cambridge: Harvard University Press. (London: Oxford University Press.) 1918. Pp. viii + 673. $2.75 net.

[A painstaking account of the various efforts made to obtain better State control over assessments for taxation.]

MORIMOTO (KOKICHI). The Standard of Living in Japan. (Johns Hopkins University Studies.) Baltimore: Johns Hopkins Press, 1918. Pp. 150. $1.25.

[An entertaining study on income and expenditure; the minimum required (*a*) for existence, and (*b*) for efficiency, European compared with Japanese dress as to cost and comfort, and so forth.]

PITMAN (F. W.). The Development of the British West Indies, 1700–1763. (Yale Historical Publications, Studies, Vol. IV.) New Haven: Yale University Press. (London: Oxford University Press.) 1917. Pp. 495. 10*s*. 6*d*. net.

French.

GIDE (CHARLES). Projets d'Entente Financière après la Guerre. (Extrait de la Revue d'Economie Politique, 1918.) Paris: Libraire Sirey. 1918. Pp. 16.

[The project of pooling the expenses of the war among the members of the Entente in the proportions of their national income is dismissed as expecting too much from "Uncle Sam," whose contribution would thus be doubled. There is more to say for the scheme of a great international loan for the purpose of liquidating the expenses of the war. About half the pamphlet is devoted to the

refutation of fanciful schemes for extinguishing debt by enormous emissions of paper money. A more modest suggestion, a "minimal solution," would be to give international currency to notes issued by the great banks in different countries or a new paper issued by a *consortium* of these banks.]

German.

HAHN (DR. A. VON DER). Kriegs- zur Friedenswährung. Tubingen: Mohr. 1918. Pp. 64.

[This is a supplement (*Ergänzungsheft XIV*) to the *Archiv für Sozialwissenschaft,* dealing with effect of the transition from war to peace on the value of gold and other moneys.]

Italian.

ABATE (E.). La diversificazione tributaria e l'imposta sul reddito con prefazione di L. Einaudi.

GARELLI (A.). Il concetto di reddito nella scienza finanziaria. Milano: Società Editrice Libraria. 1917.

VALENTI (G.). Principii di Scienza Economica. Vol. II. 3a Edizione. Firenze: Barbera, 1918.

THE ECONOMIC JOURNAL

SEPTEMBER, 1918

SOME ASPECTS OF THE PROPOSED CAPITAL LEVY.

On a recent occasion (*Economic Problems of Peace after War, Second Series*, pp. 56–86) an effort was made to estimate the balance of advantage of various schemes for an extensive cancellation of the National Debt in so far as these had been developed up to the beginning of the present year. It is evident that some of the demerits and some of the merits of any given scheme were peculiar to that scheme, while others might be conceived to apply to any special tax which was designed to reduce the whole or a large part of the debt. In the present investigation an attempt will be made to deal with the general question. This is an inquiry which is subject to special difficulties, since most proposed taxes depend as much, if not more, upon the manner in which general principles are applied as upon the principles themselves.

The great argument for redemption of a vast war debt still remains Ricardo's plea for a "ransom," in the sense that such a debt entails a charge upon income in the future until it is redeemed, and there seems to be little object in delaying repayment. It is true that, subsequently, Ricardo annexed a governing condition, namely, that the country which contemplates an extinction of debt must be "resolutely determined" not to have recourse to future borrowing. If this condition is valid it is difficult to see how it can be satisfied, since no Act of Parliament can bind its successors. Indeed, under modern conditions it may be doubted if the observance of this condition would be wise. Ricardo seems to have contemplated the cancellation of war debt by means of a general contribution not only in order to free the nation from that debt, but also to prevent in the future the formation of a new unproductive debt. But, when war mobilises the larger part of the manufacturing resources of the country, a nation which bound itself by a self-denying ordinance of this kind (if that were possible) would be likely to prejudice its powers of defence,

and that, too, in all probability even more in the future than at the present time. Thus the permanent extinction of war debt, which Ricardo had in view, is only possible under conditions of a perpetual peace.

The reference to Ricardo's views is no idle antiquarianism. On the contrary, he is quoted because he envisages a summary redemption of war debt in a more virile spirit than most of the modern writers who lean towards this method. He never contemplated half-measures : with him it was a matter either of "all or none." And there is little doubt that the logic of the situation admits of only two alternatives, namely : on the one side a complete redemption and on the other a sinking fund, spread over years, and obtained from the ordinary Budget. All schemes which aim at a special contribution to discharge some fraction of the debt (such as two-thirds, a half, or a quarter) manifest all the futility of an ineffective compromise. Also the nature of the contribution is no less clearly defined by the circumstances. The alternatives here are between levying upon the *source* of income for the contribution or upon income for the service of the debt—in each case above the minimum appropriate to either situation. As regards the former, the Levy ought to apply to the source of all income, both actual and potential, above the minimum agreed upon. If the term "Levy upon Capital" be used, then it is to be understood as applicable, not only to material capital, but also to immaterial capital, as well as to what is sometimes called consumers' capital, such as furniture, clothes, jewellery, etc. The position of incomes obtained by personal exertions occasions no little difficulty. It is by no means easy to devise a Levy which would apply to them, and it would turn out in the end not to be a real Levy but a system of payment by instalments, that is, in effect, an extra income-tax upon earned incomes. It follows that, as far as these incomes are concerned, the proposed policy reduces itself to an accelerated redemption of debt by means of what is virtually an increased income-tax. On the other hand, if incomes from personal exertions were exempted from the scheme on the ground of the difficulty of assessing and collecting the instalments, it would suffer greatly in equity and to a less degree in productiveness. If Charlie Chaplin resided in this country and continued to earn the striking salary with which he is credited by means of his no doubt considerable personal exertions, it would be felt to be palpably unjust that such an income should be liberated from contributing to the special redemption of debt, while trust funds of moderate

amounts were made liable. The difficulty of assessment and collection in this special case is very considerable. If the State compromises by taking an extra income-tax on those earned incomes (including wages) which were decided to be subject to it, there would be a certain loss in the productivity of this part of the Levy, since this duty, added to the tax remaining after the Levy would have been made, might be sufficiently high to check the increase in incomes of the larger amounts. On the other hand, if the earning power of a man's brain or artistic faculty be computed actuarily, and the sum so arrived at be divided into a number of annual payments, then it is difficult to see how the estimate could be realised. Many would die before their expectation of life had been reached, while others would earn much less than the valuation made. It would follow that in these cases instalments could not be obtained, and it would occasion great discontent if others, who had succeeded beyond their valuation, had their quotas subsequently increased. These difficulties are great, though not insuperable, but the main point at the moment is that if there is to be a great redemption of war debt (which should in principle apply to the whole of it, for which this country must provide the interest) the balance both of equity and productiveness points to the inclusion of immaterial capital in the Levy; while, in this particular case, the Levy in fact becomes a special income-tax. As applied to land and many of the smaller incorporated businesses, a similar transformation of the Levy would probably be necessary; so that in these instances the device of a Levy breaks down, and the impost becomes a special income-tax assigned to the redemption of debt.

It is not a little surprising, though in one sense possibly a sign of the times, that in most discussions of this question one of the most fundamental issues is altogether overlooked. The scheme proposed should be regarded from its effect upon public expenditure. It has long been a commonplace in treatises upon public finance that war involves extravagance. It is probable that no nation has ever been fully prepared for all the surprises of long-continued hostilities upon a great scale, and hence various types of military supplies have to be procured at the shortest possible notice. This is not conducive to economy, and the pressure of the times leads to a relaxing of the usual safeguards against public extravagance. Already there is sufficient information to show that our management of the present war has been no exception to this rule, and it is to be feared that only a part of the waste and avoidable loss has been disclosed. But the infection of extravagance is not confined to those departments most closely connected with

the conduct of hostilities. It extends and touches many branches of the public service. In the years following the declaration of peace the usual corrective comes from the desire of taxpayers to reduce the burden of taxation which the war leaves behind it. They are compelled to adopt this course when the pressure is felt more keenly after the cessation of war expenditure, and perhaps when trade is dull or even depressed. Even under these circumstances the restoration of economy is only obtainable after a considerable period and with no little difficulty. There can be no question that the reduction of public extravagance is not only desirable but necessary; and it can be seen, both in principle and from past experience, how it is enforced under a system of taxation for the payment of interest and sinking fund upon the war debt. It is, indeed, only then that the people realise, in the case of a war largely financed by loans, what its material cost has been. This being so, it is not unnatural to inquire whether the adoption of a Capital Levy would have the same effect. As far as it is possible to forecast the consequences in this respect, it may well be doubted whether a sudden unique contribution, payable for the most part at one time, would be as effective in compelling economy as the steady pressure of a high rate of taxation over a long period. The driving power of such part of the Levy as might be payable in instalments would be comparatively limited. New incomes, made by those who did not contribute to the Levy, would necessarily not have felt it. Even those who had paid their contributions, while they would no doubt feel the diminution of their nominal capital intensely at the time, would not have the same incentive to exert themselves in controlling expenditure, since they would judge that no such efforts would restore to them the capital which they had been compelled to surrender. In extreme circumstances the advocates of extravagance would always have a half-formed idea that in case of necessity another Levy might be made. It has happened only too often that "the special and unique occasion" of one Government becomes the habit of its successors, if it seems to be the line of least resistance. "Special occasions" lead inevitably to special pleading, and exceptions tend to become the rule. As Mr. David Hannay has said very neatly in this connection: "There have been women who never had an affair of gallantry. There never was a woman who had only one."

I may, perhaps, be pardoned for insisting upon this aspect of the situation, because it seems to me that, contrary to the general opinion, the great post-war financial problem will not be distribu-

tion of taxation nor the productiveness of revenue, but the disciplining of expenditure in order to secure results adequate to the outlay, an aim which seems unfortunately to have been lost in the limbo of forgotten things. I fail to see how, five or ten years after a complete Capital Levy had been made, there would be the same steady pressure towards economy, as if at that time there was still a comparatively high level of taxation to be borne. Very large numbers of the population would not have contributed to the Levy, many of these will have suffered lightly from war taxation since during that time their real earnings (after deducting the increased taxes they bore during war) will have been higher than before. Others will be making increased incomes through post-war activity. Even those who contributed to the Levy will have learnt by this time to acquiesce in what seems to them an evil that cannot be remedied.

At this point the main thread of the argument may be broken for a moment in order to consider how the foregoing line of thought would be modified, if instead of the Levy being logical in paying the whole debt as defined, it was illogical in redeeming only a part of it. In the latter case there would be a scale of taxation intermediate between that required if there had been no Levy and what it might be conceived to be if there had been a Levy which would have sufficed to redeem all the war debt. In that event taxation ought not to be as high as if the redemption of debt were dependent on the normal sinking fund, but it would be sufficiently high to exert some influence towards economy, though necessarily not to as great a degree as if there had been no exceptional redemption. This seems to be the only economic argument for a partial cancellation of debt, but it is unfortunate that, to the precise extent it is relied upon, it injures the main contentions which support the principle of a Levy. That argument must insist that a special contribution for this particular purpose constitutes a tax different in kind from all others. This can be advanced with some plausibility when the redemption is to be complete, but it fails if that redemption is to be only partial. In some respects the latter proposal resembles an exhortation to someone to make a supreme heroic effort to jump a chasm—and then telling him to check his leap half way!

An objection may at once occur to the reader. "How," it may be asked, "can it be maintained seriously that the redemption of all the war debt would promote governmental extravagance? If no debt is redeemed except by a small annual sinking fund, it is surely a gross fallacy to suppose that the consequent high

taxation will force economy; since, of the revenue which must be raised under those conditions, a large part will consist of funds required for service of the debt which cannot be altered by any economy on the part of the Government." The objection, I conceive, is correctly stated, except in so far as it altogether fails to envisage what is implied in the situation which would follow a thorough-going application of a Levy. In that case taxation could be very greatly reduced. To make the situation definite, it is necessary to form some picture of what taxation might then be expected to be. We cannot tell what the new necessary expenditure on Civil Government and Pensions would be, and there is complete uncertainty as to what will be required for purposes of defence. If it be assumed for purposes of illustration that the outlay under these heads might be about 300 millions, then, when it is kept in view that income-tax on war loans would have disappeared with the redemption of these loans, it might be anticipated that the proportion to be found by income-tax could be obtained at the equivalent of a rate of about 1*s*. 8*d*. to 1*s*. 9*d*.,[1] on the assumption that taxable income, immediately after the Levy had been made, would be rather more than it was in 1913–14. In any case, the necessary rate would fall between 1*s*. 6*d*. and 2*s*. But would anyone maintain seriously that this would be the actual rate? When the war ends income-tax will be at least 6*s*., and possibly considerably more. The actual rate after a complete Levy would be the resultant of public extravagance on the one side and the desire to make substantial reductions in the war rate on the other, and it seems hopeless to expect that there would be even the most remote prospect of the rate falling to what it ought to be. The "ransom" would, in fact, have turned out to be a financial treaty of Brest-Litovsk.

A closer approach to some of the implications of the Levy may be made by an examination of a curious conflict in the arguments by which it is supported. These arguments are contradictory, though not necessarily mutually destructive. On the one side it is urged (*e.g.*, by Mr. S. Arnold, *Hansard*, 105, pp. 897, 898) that the taxation required for the service of the debt is paid in the main by those classes who own the debt, and that therefore they might write off the liability by reducing their capital. The inference is—as has been expressly stated by Ricardo—that the

[1] It must be remembered that with a graduated Levy the larger incomes would be reduced more than in proportion. Accordingly, the revenue which would have been raised at a pre-war rate of 1s. 8d. or 1s. 9d. would now require considerably increased rates on the larger incomes. The effect would be felt by new incomes.

Levy can be made without any sacrifice by the class to which it is applied. The other type of argument is the converse, namely that the Levy *does* involve sacrifice, and that it affords an opportunity of reducing inequality of sacrifice on the ground that young men, as a class, are physically strong but financially weak; older men, as a class, are financially strong and physically weak. The State calls for the strength of each, demanding military service from the first group and financial service from the latter by means of the Capital Levy (*e.g.*, Professor Pigou, *Economic Journal*, XXVIII., p. 146).

Both views cannot be maintained at the same time, since the Levy must either involve sacrifice or not involve sacrifice. But, as it seems to me, neither view is maintainable in the form in which it has been expressed. The first has been best put by Ricardo. "A man who has £10,000, paying him an income of £500, out of which he has to pay £100 per annum towards the interest of the debt, is really worth only £8,000, and would be equally rich whether he continued to pay £100 per annum, or at once, and for only once, sacrificed £2,000." Under the limpid clearness of Ricardo's statement several assumptions are concealed, some regarding equity, others concerning finance. There will be occasion to deal with several of the first in another connection, while the latter call for immediate consideration. It is taken for granted that the person in question is typical and that he bears a due proportion of taxation for the service of debt. It is assumed that owners of property bear the whole of this taxation, else the capitalisation of the tax annuity will not work. But the same assumption as to stability of taxation is extended to the other taxes for which the man of property is liable. The total taxes to which the income of £500 is subject consist not only of the £100 per annum specified but also of the additional proportion of this tax-payer to the expenditure other than that for the interest on the debt. If the institution of a Levy has effects upon this other taxation, then the man will not be "equally rich" whether there is a Levy or not. If the Levy causes the remaining taxation to be lighter than it otherwise would be, then the man is *pro tanto* better off. If, on the other hand, the Levy causes that taxation to be higher, he will be worse off. For reasons already advanced, unfortunately, the latter is the more probable conclusion. But the main financial statement of Ricardo is still to be dealt with—is his representative man "equally rich" where there is a Levy or not, when no account is taken of variations in taxation other than that for service of the debt?

Ricardo only considers two possibilities, on the one hand a complete redemption of the debt by a single operation and on the other hand the maintenance of the debt in its entirety. There are several other alternatives, amongst which may be mentioned a partial redemption of debt by means of an incomplete Levy from capital or a progressive diminution of debt out of income. The last calls for comment. It must provide from taxation enough to meet the interest on the debt and in addition an annual sum, representing a small percentage of the debt, for redemption. In the latter case the following appears to be the position regarding the annuity for service of the debt. At the time when it is proposed to make a Levy the charge for interest (which in the one case it is planned to capitalise and write off and in the other to raise by taxation) is the same. If there is no Levy, then in addition to the charge for interest there will be the contribution for the sinking fund, also to be raised by taxation. It follows that, at this point and regarded arithmetically, the advantage seems to lie upon the side of the Levy. But this apparent advantage disappears when it is remembered that on the one side after the Levy taxable income would be less, and on the other side the interest charge capitalised is not the whole amount of taxation to which those persons subjected to the Levy would have been liable; and, as already shown, the Levy will almost automatically increase this other taxation. It is quite possible it would have the effect of increasing it to an amount which would be equivalent to a small sinking fund by the continuance of sheer waste in administration, and in the lapse of a few years this balance would be further augmented very considerably. It follows, then, that the Levy presents no initial advantage from this point of view. After the first year of the sinking fund, if no new unproductive debt is created, each year shows an added balance of disadvantage against the Levy, for it has capitalised a declining charge as if it were a fixed one. There is another consideration which must operate in the same direction. Apart from conversion, the sum required for interest upon a given amount of debt is fixed, but the proportion of that sum to be borne by a unit of income tends to decline, because the total quantity of income subject to taxation increases. For example, the taxable income for purposes of income-tax upon a true comparative basis rather more than doubled in the thirty-three years from 1881–2 to 1913–14 (*e.g.*, 1881–2 468·7 millions, 1913–14 951 millions). It is true that during the same period expenditure more than doubled, but if the part of the expense of

the South African War which was paid from taxation as well as the charge for interest and redemption of the other portion that was borrowed be deducted, it is evident that taxable income had increased rather faster than normal expenditure. This tendency showed itself in spite of comparatively liberal outlays upon social betterment which, towards the end of the period, were upon a larger scale than ever before. There can be little doubt that in an equal period after the end of the present war the proportionate advance in taxable income will be even greater, so that Ricardo's representative man would stand to lose under this head also. Thus he would be trebly damnified by electing to extinguish his annuity for interest upon the debt through a Capital Levy—first by the avoidable increase in taxation other than that for interest, secondly by losing the ultimate benefit from conversion, and finally by excluding himself from the possible decrease in the rate of taxation through increase in the taxable resources of the country. It follows that, on the whole, the probabilities point to a Levy involving sacrifices upon those who are subject to it.

If, then, a sacrifice *is* involved, we come to the other argument, which admits it, and proceeds to contend that it is precisely this sacrifice which justifies the Levy in equity because it will fall mainly upon the old men who are exempt from military service. If the argument had been sound, it would have been weakened by the raising of the military age in April. But upon the whole I am inclined to think it rests upon a dubious foundation. Men in the Forces have been considerable subscribers to War Loans. There are, also, many of them who own property, often of large amount. Are their property and savings to be levied on or will they be exempt? If subjected to the Levy the whole principle of this argument goes by the board—if not, then all the valuations of the wealth upon which the Levy would be made must be revised and reduced by an unknown but large sum. Further, this view takes no account of succession and bequest. Old men, and old women, too, who have property, usually conserve it in the interest of some younger lives which they desire to benefit. To the first class the infliction of a Levy is of comparatively little concern, for the time during which they will feel it is bound to be relatively short. Thus by far the larger part of the true incidence will be upon their successors. Amongst those of them who are men the great majority will have served in the combatant forces. But it may be said that half or more than half the beneficiaries will be women. And their claims to succession cannot be denied, for they include, alas! too many young

widows of officers and others who have served, in very numerous instances with children to educate upon niggardly pensions. Again, from the time that the Germans began to sink hospital ships and to intensify the bombing of hospitals, there can be little doubt that the risk in war which presents the highest degree of sacrifice is that of nurses and other women employed at the bases. The former in particular, even in less barbarous wars than this, were regarded as immune from hostile attack both by reason of their work of mercy to all belligerents alike and by their sex. Now they are subject to death and mutilation without the man's remedy in the chance of retaliation. It is on many of these that the real burden of the Levy will fall.

Once the question of equity has been raised it may not be wholly unprofitable to follow it just a little further. Those of us who have been insistent, in season, and, perhaps, sometimes apparently out of season, in urging personal economy with investment in War Loans and in condemning all profuse expenditure, are in danger of being placed in a position of no small difficulty to the precise extent that the idea of a Levy is advertised. It is waste of time and breath to dilate on exemptions from the proposed Levy and graduated scales of duty; what the plain man sees is that if he spends a certain sum of money he gets all the satisfaction he can extract from it. If he saves it, he hears that the Government is advised to take a part. This he regards as unjust, and he decides not to save, in many cases ceasing to maintain regular subscriptions to War Bonds or savings certificates which have been made previously. Within my personal knowledge these proposals have had a marked repressive effect upon the subscriptions to War Bonds, which is to be greatly regretted inasmuch as each revival of the propaganda for a Levy will add very much to the difficulties of financing the concluding stages of the war.

The reduction of amounts already saved by means of a Levy is hard to justify in equity when this course lets extravagance go free. It almost seems as if it were intended that an extravagant Government should be consistent in giving a bounty to extravagance by imposing a differential tax upon saving. It would not be unnatural for the public to say: "What I spent I have, what I saved I lost." And the annoying thing will be that the public would be largely in the right, for no Levy could reach expenditure upon articles of immediate consumption which perish in being used.

All those who have given serious consideration to the finan-

cial position after the war have insisted upon the need for large supplies of capital. It is an essentially Gilbertian proceeding to foster saving by seizing a part of savings already made—just as if life after the war were to be a new banquet of Elagabalus where the guests were prepared for the feast by the administration of an emetic.

It cannot be questioned that the defence of the most vital liberties of the British peoples is an interest which is common both to the present and the immediately succeeding generations. If those now alive failed in their duty, the future of their successors would be gloomy in the extreme. Therefore it seems only reasonable that the material burden should be divided between the present and the future. To the best of our knowledge and judgment we are securing the national freehold for our successors, and it is their duty and privilege to share in the loss as far as they can. It follows that the proposal for a Levy errs in so far as it proposes to aim at liberating future incomes from what may be conceived to be their proportion of the cost. Contrary to the opinion of Professor Seligman and others, it has been urged by Professor Pigou that under no circumstances can future generations be made to pay any part of the principal or interest of internal War Loans—for " what posterity will have to pay, posterity will also receive." The epigram reminds one of the river of Heracleitus and the arrow of Zeno the Eleatic. This is surely to breakfast on antinomies and to sup on paradox. So it might be argued that excessive convictions for drunkenness were not an evil, for what the country paid in fines it also received. Even at the risk of being quite " unsound," one ventures to suggest that the question is not determined by a mere mechanical balancing of the warrants and cheques which are used for making the payments. While in banking every debit must have a credit, this does not dispose of the matter of profit or loss on a series of operations. What is of obvious importance is not the mere arithmetical process, but what is really paid and really received when debt is redeemed. When Government stock is saleable freely on the market, redemption brings no direct and immediate benefit to the owners unless they convert the sum received into commodities—the indirect effects may be advantageous to them or not, according to circumstances. By far the larger part of the funds disbursed in paying off debt will be reinvested; and the stockholders are only the channel through which these funds pass, either immediately or ultimately, to a new use. If a portion of the investment is overseas, the case is analogous to that of the

repayment of a foreign loan. When the larger part is used at home, the capital which comes into existence will not be distributed *gratis* like the money sometimes reported in the Press as having been scattered in the streets by amiable visitors who are in search of a new sensation, but must be remunerated out of the results of the production it assists in establishing. So it follows that the resources for the redemption of war debt, provided by the sacrifice of the tax-payers, are not balanced by an unbought gain; but, when converted into capital, result in the other series of sacrifices arising from the production which results: that is to say, there is first the sacrifice of the tax-payers, then the sacrifice of production against which there is only one benefit (just a little in excess of the latter), namely, the payment made to the factors of that production (of which interest on the capital is one). It follows that in each case the original sacrifice remains. What posterity pays, posterity will also receive—at the cost of earning it. Speaking quite generally, the effect of a loan is that posterity is rendered liable to do the amount of work which is necessary to pay it off. Loans, in fact, constitute a conditional lien on the production of the future and the real burden on posterity remains the sacrifice in paying the extra taxes required for redemption. It seems, then, to be in the highest degree equitable, considering the unimpeachable benefit to posterity through a just war which is necessary in the interests of the present and even more in those of the future, that posterity should share in the cost by undertaking the necessary extra effort which will be required, if it wishes on its own behalf to reduce the debt.

Hitherto the position has been considered from the point of view of the type of a Levy on Capital which is logically most defensible, that is, one which would redeem the whole debt upon which this country has to pay interest, and at the same time a Levy which would apply to the source of all income, whether actual or potential, both unearned and earned. In one respect, if one takes any account of the great majority of current proposals, it must be noted that the tendency is to exempt earned income from participation in the Levy. In fact, many proposals for a Levy are naive attempts to shift the payment of the proportion of war costs which would otherwise be borne by earned incomes to the owners of material capital. This is obviously inequitable. If the war had been financed by raising the whole cost through taxation at the time, these incomes would have paid much higher income-tax and super-tax than the amounts which were actually demanded from them. By urging a Capital Levy they would free

themselves from such proportion of taxes as they would have been liable to if there had been no Levy. Such a form of the proposed Levy is so flagrantly inequitable that it recalls the sneer of Juvenal against the parasites who were content *aliena vivere quadra*.

So far the scheme has been considered from the point of view of equity. While it is true that the balancing of these considerations tends against the suggested Levy, it must be remembered that, in questions of taxation, equity alone is never decisive, and so it remains to examine the more probable effects of a Levy upon production in general, and especially on the productiveness of the revenue. The alternatives of a Levy and a sufficient amount of taxation to meet the interest on the debt and to provide a sinking fund can scarcely be outlined in any satisfactory manner unless account is taken of the prospects of taxation in the chief producing countries. All the more important belligerents will be heavily indebted. It is difficult to see how some of them will be able to meet the interest upon their debts. If an enemy country will be forced to impose a Levy on Capital, we call it repudiation or bankruptcy, and claim that this course represents a very grave deterioration of its credit and a serious impediment to its commercial recovery. The psychology of war has many vagaries, not the least of which would be the conclusion that the same course, when adopted by an enemy, represents financial collapse, but in our case affords evidence of supreme monetary strength. The position may be illustrated by a comparison of the possible financial future of Germany and this country. Let it be assumed that the former will have no option but to write off a part of its debt (which is in effect a Levy on its Capital), and that this country will be free either to follow the same course, or else to proceed by the normal method of post-war taxation. Upon the first alternative Great Britain would be at a disadvantage as compared with a third country (say the United States) in which no Levy had been made. This is a question which concerns us in a pre-eminent degree. The enforcement of a Levy could scarcely fail to have a most prejudicial effect on the position of London as an international centre of finance. The building up of the financial reputation of the City has been the work of centuries, and it may be lost in a single session of Parliament. There can be little doubt that a Levy, in the circumstances indicated, would produce a marked deterioration in the credit and reputation of London as an international money market, the effects of which would be felt for generations. Foreign capital, that was in the

habit of going to London, would tend to be diverted to New York or to other centres where there had been no Levy. Even if all the belligerents adopted this method, there would remain some neutrals who would be able and ready to take advantage of the opportunity. In that case Amsterdam might recover its former financial greatness. It is idle to urge that in any British Levy foreign investments in Government stocks would be exempted. Owners of capital, who are prepared to use it outside their own country, apply the most rigorous tests. Insecurity, even fancied, diverts the flow, or increased interest is exacted to cover the supposed added risk. Accordingly, if there is any country in which there will be no Levy and which is capable of transacting international financial business (and as far as can be foreseen at present there will be several) the imposition of a Levy in Great Britain would weaken its position as a great money market to an alarming extent. It is probable, too, that this would react upon home industry in the new situation after the war by causing the rate of interest for capital employed in trade to be higher than it would have been otherwise. It follows that under the conditions now under consideration, there would be a certain loss, and that of large amount, which would be consequent upon the proposed Levy. But there remains the other alternative which at first sight is no less unpromising. Suppose that in order to avoid jeopardising the position of London in the world's money market (as well as for other reasons) there was no Levy upon Capital in Great Britain, but that Germany was compelled to make one, it would appear that the competition of the latter in foreign trade would be intensified by reason of the German merchant being liable to a lower scale of taxation than the British merchant. But there are a number of probabilities and contingencies upon the other side to be taken into account. Ricardo held that a high rate of taxation was not a disadvantage in foreign competition. In any case, in determining relative advantages in such competition, taxation is comparatively unimportant. The available information points to the prospect that any German Levy, which is likely, will leave very considerable sums to be raised by taxation. Therefore profits made in foreign trade in Germany will probably be subject to high taxation even after a Levy was made. What, however, is much more important than the respective rates of taxation will be the rates of interest on capital used in trade. With a Levy in Germany and no Levy in Great Britain the loss of the former country in increased interest would greatly outweigh any saving

that might be made in taxation. Not only so, but, as has been already shown, there is good reason to believe that the reduction in taxation, upon which supporters of the scheme dilate, is much over-estimated; so that, upon the whole, the inconsiderable advantage which British foreign trade would at first sight appear to receive, if a Levy were made, would be relatively unimportant when contrasted with the highly probable injury it would sustain through the damage to London as an international financial centre.

In any estimate of the consequences of the proposal attention must be directed to the effects of the scheme upon accumulation of capital in the future. As the irrecoverable expenses of the war mount up, it becomes increasingly clear that one of the important factors which will determine the rate of recovery after the war will be the rapidity with which capital is formed in order to provide for industrial reconstruction. Therefore it follows that, as far as circumstances permit, no obstacles should be placed in the way of extensive saving in the first years of peace. At first sight it seems that a high income-tax, with other taxation also high, would constitute a serious obstacle to saving. From this point of view it appears that all those who begin to receive incomes after the war will have more inducement to save if taxation (and particularly income-tax) is low, instead of being high. Also, as the result of a Levy, interest would be higher, and to that extent they would seem to have a larger margin from which to save. On this showing the prospect for saving seems alluring—higher interest and lower taxes. Unfortunately there is another side to the picture. The increase in interest beyond the rate which would have been obtained otherwise would be the acknowledgment of the popular estimation of the emergence of a new risk. If the Levy were logical in repaying the whole debt, the percentage taken must be very high. This would be long remembered; and, despite the most solemn protestations that the occasion was unique, a recurrence of the Levy would be dreaded. On the other hand, if the Levy were only partial in redeeming some fraction of the debt, there would be the ever-present fear that another would be made to extinguish the remainder. It is difficult to say which of the two would be more prejudicial. On the whole, possibly in this respect the illogical Levy would be the worse, for the uncertainty following it must remain more present and insistent. Whatever the disadvantages of high taxation, as the alternative, will be, the rate within narrow limits will be certain once the financial transition is complete. Also, as the sinking

fund becomes operative, the rate of income-tax should tend to decline, especially as production expands. In fact, upon this method the taxpayer knows his position: under a Levy he will not—indeed, cannot know it. No doubt it may be argued that, assuming a Levy to have been made, as time passes and it is not repeated, the expectation of another being imposed will gradually fade away until it becomes negligible. But, in the first place, the damage, as compared with countries where there has been no Levy, will have been done, and in the second place the impression produced by it will have been most vivid in the important interval of five to seven years following the war. It is then, as has been shown in detail by the Hon. W. Pember Reeves (*The Times*, July 25th, 1918), that confidence will be needed most, and to introduce an artificial uncertainty amongst the many which will be inevitable would show a serious deficiency in practical statesmanship. During the war people have grown accustomed to high taxation, and in the first generation after peace business will adjust itself to a rate which, though still large, ought to show a gradual decline from the level reached in the last year of the war. Though the conditions will be hard, they give the security which is required for saving, while the inevitable uncertainty which would follow the imposition of a Levy would be adverse to accumulation during the most critical period, and long after that if there was any influential demand for a repetition of it.

The type of persons who have hitherto saved may not be particularly intelligent, but they have a faculty of looking ahead and are gifted, or, perhaps, cursed, with a peculiarly tenacious memory. If they are told that a high income-tax differentiates against saving because income spent is only taxed once, while income saved and invested pays the tax more than once, this would not be accepted as a defence of the Levy. These people will not unnaturally point out that, since the Levy is one upon Capital, it starts by taxing saving, and probably they would be unkind enough to compare its method with that of Ottoman tax-gatherers. The whole basis of the scheme fails to take account of the psychology both of taxation and of the saver. The system of payment by instalments has become so universal that it is recognised as lightening the burden of a debt to be liquidated. Besides other objections, the reversion to the payment of a capital sum, even when it was no more than would be taken from the same taxpayers in income-tax for the service of the debt, would be felt to be much the heavier burden of the two. The sense of injury would react upon

accumulation either in checking the rate which would otherwise have been possible, in causing people to expatriate themselves, or even to conceal their investments in overseas countries. No doubt a high income-tax would also operate to some extent in the same direction, but there would be a reasonable probability that the rate would decline partly by conversion of the debt, partly by the operation of the sinking fund, and partly by the gradual increase in income subject to taxation.

Further, it is to be noticed that in what has been said so far upon this question the statement is unduly favourable to the principle of a Levy. Besides the alternatives of comparatively high income-tax and a lower rate following the Levy, there is another important condition which will be exceedingly adverse to saving. If earned income is not to escape, and if the Levy is to be made less offensive for certain owners of material capital, both classes will be subject to exceedingly heavy taxation while they are paying their instalments. Their position, particularly that of the first class, would be exceedingly unenviable. Since they will in effect be contributing to a rapid, instead of a slow redemption of debt, the amount of special taxation for this purpose must be very high. This is to be added to the taxation they must pay for purposes other than redemption of debt, which will tend to be higher after a Levy than if there had been no Levy. Therefore, if the comparatively high income-tax which would be needed (if there is no redemption of debt beyond a moderate sinking fund) is alleged to check saving, would not the very much higher taxation involved in the system of instalments be in danger of extinguishing it altogether amongst these classes? The seriousness of the prospective burden may be illustrated in the following manner. If it be assumed that a given rate of income-tax will be divided as to five-elevenths for the expenses of government other than the service of debt, another five-elevenths for interest on loans, and the remaining one-eleventh for redemption at one per cent. per annum, it will be worth endeavouring to calculate what the burden of a representative earned income would be under the principle of a Levy. Suppose the income in question is one which would pay income-tax upon the basis of there being no Levy at the rate of 4*s*. 7*d*. To avoid unnecessary complications in the illustration, it may be assumed that the valuation for purposes of the Levy would be proportionate to the sum allocated from the tax on this income for sinking fund, and that the expectation of earning-power was ten years, or, alternatively, that ten years was the period over which instalments were to extend.

Upon this basis, omitting for the purpose of simplifying the calculation the probable increase in taxation for the expenditure remaining after the Levy was made, if the whole debt was extinguished, there would be first of all the same five-elevenths or 25*d.* tax for ordinary expenditure. The amount taken by the Levy as a first instalment would be ten times as great as that paid to the sinking fund for redemption on the other method, that is, 50*d.* After the first year the taxpayer would be liable for 90 per cent. of his Levy upon which he would have to pay interest, in order to meet the interest upon the amount of debt which he was not yet able to redeem, which would come to 22*d.* more, making a total rate of 8*s.* 1*d.* in all, an increase of 76 per cent. In the ninth year the Levy would be the same, and if it be taken that the rate for ordinary expenses of government had not varied, the main change would be in interest, since now there is only one instalment outstanding. Thus the total would be 77*d.*, or an increase of 41 per cent. After the tenth year the Levy would cease, but this would bring small consolation to the taxpayer, since, if his valuation was correct, his earning power would cease likewise and, necessarily, low taxation is of no interest to the man who can make no income. If, instead of redeeming all the debt, only half was cancelled, then this taxpayer would have only to pay half as much in instalments on the proportion of his valuation outstanding, but he would be liable for half the amount he would have paid if there had been no Levy for service of the debt. Altogether this hybrid type of Levy would mean an increase in the rate of his taxation in the first year of close on 40 per cent. At the moment it is fashionable to take the debt at the close of the present financial year upon which this country will have to find interest at 8,000 millions. I think this estimate errs on the side of undue pessimism; but, if that figure be taken for purposes of calculation, the post-war revenue (which is said to be necessary) is often put at 800 millions. This would divide conveniently into tenths, five-tenths for interest, one-tenth for sinking fund, and four-tenths for the remaining expenditure. A complete Levy upon the same income would impose an initial increase of 85 per cent.; an incomplete one, which paid off half the debt only, 45 per cent. It is clear that saving would be difficult if not impossible with an income-tax (for this is how the Levy would be regarded) which starts by approximately doubling the rate which would have been otherwise necessary. If one takes a high earned income (say £10,000, which must be assumed to be the whole

income of the persons whose cases are under consideration) by the same method, either a complete or an incomplete Levy (which paid off half the debt) would wipe it out altogether in the first year. But perhaps an income of this imposing amount demands more respectful treatment. Of course, when the conditions of office or employment include a pension, that must be taken into account. The next question is, What is to be the expectation of life during which the income and pension are received? I propose to take only ten years, though judging from the available data—relating to Lord Chancellors—that period is much too short. Thus we have an income of £10,000 capitalised at £100,000. For a complete Levy a capital of this amount would be required to pay about 50 per cent. Also, not according to my calculations, but in those made by some who lean towards the Levy, income-tax after the war (provided there is no Levy) upon the basis of an expenditure of 800 millions, it is said, would require the doubling of the rate of 1917–18. If so, the income in question would be subject to tax at 13*s*. 1*d*. Four-tenths of that for Civil Government and Pensions would be 63*d*. in the £. The first instalment of the Levy would require 157*d*. in the £, and interest on the instalments, still to be paid, 70*d*. in the £, or a total rate of 290*d*. in the £. Even a Levy discharging half the debt would still leave Lord Chancellors and others, earning an income of this amount, owing the Government a few pence in each £1 of income after they had surrendered it all!

Without dwelling upon the extreme cases (which constitute a *reductio ad absurdum* of some forms of the Levy) it is clear that the initial rate would be so high that it must tend to check effort in the direction of economy.

It appears, then, that this part of the argument results in a dilemma. If a Levy is imposed upon immaterial capital it seems likely that it will inevitably break down in practice; if, on the other hand, immaterial capital is exempted, then the whole principle is endangered. Again, if the Levy is complete, both in applying to all capital (both immaterial and material) and to all the debt, it is in danger of never being applied: an incomplete Levy is based on a contradiction which becomes more explicit the more it is developed. The latter is an unescapeable conclusion. It is a case of "all or none" as regards debt redemption and the capital levied upon. "All" is likely to be rejected—leaving the other alternative.

There remains one type of argument, some of the implications

of which I would venture to deprecate as strongly as possible. This takes the form that the rate of taxation after the war will be so serious that it cannot, or will not, be borne, and that a Levy is the only other resource. To put the matter perhaps a little brutally, if the Levy is to be a straight deal and not a crooked one, it must take at least as much as the capitalised value of the taxes it commutes. As already shown it is likely to take more, both directly and indirectly. Therefore *a fortiori* if the country can bear the Levy it could bear the taxation for which it is to be substituted. It seems to me that there is a general tendency amongst those who favour a Levy to overestimate the rate of taxation in the early years of peace. Elsewhere (*Economic Problems of Peace after War*, Second Series, pp. 89–136) I have endeavoured to picture the financial situation in that period. While the burden must inevitably be heavy—it will be that whether there is a Levy or not—my conclusion was that it would be far from being so heavy as to be intolerable. But those who apparently tend towards a different view would not admit my figures, just as I do not accept theirs. However, the real centre of gravity in this part of the position may be ascertained in a different manner. Professor Pigou calculates, upon a basis which appears to me to be not a little unstable, that if there is no Levy the rates of income-tax which obtained in 1917–18 would have to be doubled. Those rates he describes as very high for small incomes and "enormously high" for large ones. Let us then see if the situation would be bettered by the Levy. Under the scale he adduces, an income of £50,000 would be liable to income-tax and super-tax amounting to 16*s*. 2*d*. in the £, leaving £9,583 free of tax. His method of fixing the Levy is to multiply Estate Duties to the extent necessary. Thus, if it be taken that a complete Levy would require four times the present Estate Duty, and that a capital of £1,000,000 (upon which the rate is 20 per cent.) yields £50,000 a year, this Levy would reduce it to £200,000, producing £10,000 a year. That income, however, would be subject to its proportion of such taxation as would remain after the Levy had been made, so that in reality the poor millionaire would be much worse off. He would also sustain another injury. A very heavy income-tax at least leaves him the hope of subsequent reduction, the Levy consigns him to an inferno where it must be finally abandoned. Further, this is only a first approximation, and further inquiry leaves the position very much worse. Multiplying the Estate Duties by four falls short of the sum required by 20 per

cent., and it is significant that part of the deficiency is to be made up "by stiffening the rate at the upper end." In any case, since four times the Estate Duty of 20 per cent. falls short of a complete Levy by 20 per cent., and it only leaves the taxpayer 20 per cent. of his capital, the adjustment points to a complete elimination of all his property. The Levy, in fact, would exact cent. per cent. It is only right to add that Professor Pigou stops short of the logical development of his own principles, contenting himself with an imperfect Levy in which only half the debt he estimates is redeemed by a doubling of Estate Duties, slightly modified and recast.[1] Still, if the operation were completed by a subsequent redemption of the remaining moiety of the debt, the result would be as stated above, except in so far as any new capital accumulated between the first and the second Levies might be made subject to the latter.

Even though this analysis has extended to considerable length, it has not been possible to touch upon some aspects of the project which are of no less importance. In particular there is the technical question of valuation which would present increasing difficulties the more closely it was approached. Also there is another side which in its wider aspects is worthy of consideration. Victory in war has been too often followed by an overweening pride in martial achievement. The latter would be a danger to the peace of the future. The heavy taxation, which normally remains as an aftermath of war, is a constant reminder of the loss and waste which it involves, repressing bellicose tendencies and promoting peace. According to the arguments in favour of a Levy that natural check upon the tendencies which make for strife and disorder would be removed, and what other influence of equal power is to replace it?

W. R. SCOTT

1 It should be added, also, that among those who lean towards a Levy, Professor Pigou is one of the very few who see that, in principle, earned incomes should be subject to it. In the calculation, summarised above, he does not take credit for receipts from this source. If that were done, the millionaire would be left with some minute fraction of his property.

A LEVY ON CAPITAL.

THE ECONOMIC JOURNAL for June contains three articles recommending a Levy on Capital as a means of paying off some, at least, of the war debt. I desire to consider, first, whether we are shut up to this method by the impossibility of paying our way by more ordinary methods of taxation, and secondly, whether the method is itself either practicable or just.

I.—Is it impossible to pay interest *plus* sinking fund on the debt out of the national income? That it is possible is surely clear when we reflect that substantially the whole of the expenditure on the war, the amount raised by loan, as well as that raised by taxation, all that has not been received from abroad by sales of securities or borrowing, has been raised from the national income. After the war only interest (*plus* sinking fund) and no longer the capital of the debt will have to be raised. What are the limits to the proportion of the national income that can be taken in taxation?

First, enough must be left to support life. This, however, is a very elastic limit. In 1800 the British proletariat supported life on about half of what that proletariat had in 1900, and in 1900 the standard of life was much lower in every other European country than in Britain.

Secondly, taxation on income must not be so high as to cause too great an exodus to less highly taxed countries. One can imagine taxation carried to a point where it defeated itself by leaving within the reach of the British Chancellor of the Exchequer fewer and ever fewer persons to pay it.

Thirdly, short of taxation that would drive people out of the country, it is argued that taxation may be so high as to destroy the motive to effort, and still more to enterprise and operations involving risk. Who, it is said, will exert himself and, still more, will risk what he has already got, to increase his income, if he has to give half or three-quarters or nine-tenths of that increase to the State? This seems to me unanswerable with regard to such a tax as the excess profits tax or a too steeply graded in-

come-tax. If a man can enjoy a given income at a low rate of taxation, but has to pay a much higher rate on every increment which comes from increased exertion or risk, there seems to me no possible answer to the argument that taxation discourages the increased exertion or acceptance of risk. But if income-tax is levied at something not too far removed from a flat rate, the result of even a very high income-tax is by no means so obvious. The *comparative* results of less and greater energy and enterprise remain the same. We will suppose that it is in a man's option to double his income by increased exertions and risks. With a nominal income-tax his income is £2,000, and might be £4,000. With income-tax at 10*s*. in the £ it is £1,000, and might be £2,000. Is it quite clear that the motive is less strong in the one case than the other? Nay, much economic argumentation has been employed to the effect that men will struggle harder to avoid a loss than to make a profit. Thus it has been argued that low wages promote industry, because they necessitate a greater effort to make a bare living, and similarly that high rents promote good farming. Nowadays it is more usual to apply the argument to the employer and to argue that anything that operates primarily to his prejudice, *e.g.*, higher wages or competition, acts really as an incentive. Professor Pigou does not seem to dispute this in general. His objection to a high income-tax under the head of productivity seems to turn on the discouragement to extra doses of energy or enterprise that arises under a steeply graded tax.

There is one more point—the effect of high taxation on the local destination of capital. Other things being equal, it is to each country's advantage to secure to itself as large a portion as possible of the world's capital, and high taxation must necessarily be a disadvantage in that competition. As far as the investment in Britain of foreign capital goes, there does not appear to be any answer. A high income-tax, levied as in Britain, cannot but deter the foreign investor. We saw that special provision had to be made for the exemption from British income-tax of foreign investors in British War Loan. Britain is more likely to be affected in the competition for capital by the converse process, the export of British capital. But here the British capitalist investing abroad cannot escape British income-tax on the income from his foreign investments except by transporting himself along with his property outside the jurisdiction of the British Chancellor of the Exchequer. So that this resolves itself into the effect of high taxation on population before noted.

The conclusion I reach is that the limit to the proportion of

the national income which it is possible to take by taxation without, first, destroying life by starvation, secondly, denuding the country of population, thirdly, destroying energy and enterprise, is comparatively far distant. Nobody pretends that high taxation of income in any form is agreeable. It is not even necessary to maintain that it has no bad ulterior effects. I hope, however, to show that its disadvantages are less than those attendant on a Levy on Capital.

When I talk of raising the money by a tax on the national income, I do not confine myself to income-tax. Income-tax must, no doubt, remain the predominant form of a tax on the national income, but it need not be the only form. Incomes necessary for subsistence can only claim exemption so far as they are devoted to subsistence. The luxuries of the poor, drink, tobacco, or entertainments, are, in their degree, as proper subjects for taxation as the luxuries, or the incomes, of the rich, and when we have all to submit to restrictions in diet, I do not see why non-protective taxes on food need be excluded. It remains to be seen whether the present Committee will be able to hammer out any workable luxury-tax. Possibly it will be found best to proceed on the Gladstonian canon that taxes on a few staple articles of wide consumption are the most productive. For instance, the best complement of the income-tax might be a tax, with a drawback on export, on all dress fabrics of a character beyond what is absolutely necessary to cover one's nakedness.

In any case, I must protest against the attempt, avowed in certain quarters, to make a few rich men pay off the debt, whether from capital or income. Apart from its manifest unfairness, the thing is impossible or inexpedient for at least two reasons. First, as indicated above, if successive increments of energy and enterprise are taxed at very different rates, energy and enterprise will soon cease to exist in the higher regions. Those who are not millionaires may have a difficulty in understanding the psychology of millionairism, in understanding why those who are already very rich should not only toil, but adventure their existing wealth, to become richer; but it will be a bad day for the commonwealth when the very rich cease to be subject to the same economic motives as humbler folk. Secondly, it can, I think, be shown that we cannot get all, or nearly all, we want even if we took the whole capital or income of the very rich. There are not enough of them. As well try to raise your whole railway revenue from first-class fares.

II.—Let us now consider the justice and the practicability of

the Levy, premising that it is to include such things as furniture, jewellery, or works of art, and that it is not (as has been proposed in some quarters) to exclude pleasure motor-cars while including commercial motor-cars.

The great objection to a Levy on Capital is its unfairness as between different forms of wealth. It seems to involve a complete abandonment of all attempt to base taxation on ability to pay. I cannot see that any one has even attempted to show how it can be fair to tax an income of £200 a year from investments and to exempt a barrister's professional income of £20,000. It is no answer to refer to death duties. First, death duties are a tax on a benefit received. Secondly, death duties can only be justified so long as they are balanced by other forms of taxation. Here, in regard either to the whole or to a large portion of the debt, the proposal is to tax capital wealth alone and let all incomes, however large, not based on capital escape taxation.

Mr. Hook makes the surely surprising statement that objectors to the scheme have not objected on the ground of its justice. My experience is the very reverse. My experience is that objectors keep asking why two people with equal incomes available for their personal expenditure—equal ability to pay taxation—are to be treated differently, not merely with the incidental inequalities that are essential in all systems of taxation, but to the extent of throwing the whole burden on one class and entirely exempting the other.

An answer is attempted by pointing out other inequalities, or stating in general terms that inequalities are inevitable in all systems of taxation, or may even be accepted with our eyes open to avoid worse evils. But surely the question will always be as to the extent and the necessity of the inequality. Here the inequality is, first, gross and, secondly, unless payment of the debt is, on any other method, absolutely impossible, that is, unless the United Kingdom is, according to traditional standards, insolvent, gratuitous.

Mr. Hook says the income-tax is equally unfair or more unfair. He takes a given capital and shows how it will pay different amounts of tax according to the way it is invested or treated by its possessor. In some cases the criticism may be just, as in the case of a wasting security, such as a mine. Whether a remedy is practicable here I do not know, but *primâ facie* a valid criticism may be made on the score of justice. Whether taxing an annuity at the same rate as interest on an intact capital is justifiable is not so easily answered. Taxing an annuity is taxing

capital as well as the produce of capital. On the other hand, an income-tax may be regarded as a means of taxing a man's personal expenditure, which is supposed on the whole to be measured by his income. This is the principle on which income-tax payers are allowed to deduct premiums of life insurance, and, indeed, the only valid principle on which discrimination between earned and unearned income can be justified. (See Mill, *Political Economy*, Bk. V., Ch. II., S. 4.) From this point of view the full taxation of annuities can be abundantly justified. The annuitant is in the opposite position to the life insurer, and has proclaimed, as plainly as his acts can speak, that he means to devote his whole annuity to personal expenditure. In Mr. Hook's instance of the investment held for the sake of an appreciation of capital value rather than for an immediate return there is not, as it seems to me, even a theoretic injustice. The selling value of every security depends on the anticipated returns in the shape of dividends, whether or not those dividends are deferred. I buy shares in a newly planted rubber company, knowing that I shall get no dividends for years. If and when the dividends begin, the State takes its full toll of them, and I cannot see that it matters in the least to the State whether I receive the taxed dividends or a purchaser from me, or at what price I have sold. To tax both dividends and enhancement of price due to actual or prospective dividends would be taxing the dividends twice over. (See Mill, *Dissertations and Discussions*, IV., 235.)

It will be noticed that, in his criticism of income-tax, Mr. Hook assumes the very point he has to prove, that capital and not income is the proper basis of income-tax. I on the other hand claim that the advantage of making income rather than capital the basis of taxation is that income is a fact, whereas capital is merely an estimate. The capital value of an investment is simply an estimate of what it is likely to bring in, one year with another. Surely it is on every ground preferable that the State should take its toll on the actually realised income, rather than on an expectation of income that may never be realised. One result of a Levy on Capital is that it would stereotype the position of all holders of wealth at a particular moment, and affect their position for all time according to values and estimates which might turn out to have been very misleading, and never more so than at the time when they would be made. *Plus valet quod in re quam quod in opinione constat.*

Professor Pigou, if I may say so, deals very fairly with the question of justice. He suggests, firstly, that a tax on material

capital could, if thought desirable, be balanced by a tax on immaterial capital, by capitalising a man's brain and energy. I think it will be found that that would rob the scheme of half its attractions, and that if the two classes of wealth are to be on the same footing, the strict justice of which Professor Pigou fully admits, that will be best accomplished by an income-tax. Secondly, Professor Pigou makes an estimate, which he admits to be very precarious, that the exemption of immaterial capital would add one-tenth only to the burden on material capital.

My general criticism would be that dealing with large classes, as Professor Pigou does, is apt to be misleading. I may illustrate. Men have hitherto had more opportunities than women both of making and of inheriting fortunes. A system of taxation based on sex, and taxing men, as men, more heavily than women, might be quite fair as between the sexes in general, but quite unfair as between the poor man and the rich woman. It would also be gratuitously unfair, as by basing taxation not upon sex, as raising a presumption of means, but directly upon means, you attain your full object. So here I argue that in income you get a far exacter measure of ability to pay than in any presumption that three-quarters of the income subject to tax is derived from capital.

Similarly Professor Pigou argues that the representative man over forty-five owns six times as much capital as the representative man below that age, and that therefore the special taxation of capital may be set off against the admittedly disproportionate sacrifice that has been demanded of our fighting men, whom his argument identifies with the whole population under forty-five. Surely the identification is too inexact to possess any real value. If it be thought fair and feasible to lighten the financial burdens of our returning soldiers, a more direct method might be found, one that would not extend to women and exempted men and that on the other hand included soldiers with capital.

We may now consider the practicability of the Levy. The first remark is that it is to be levied on individuals, not deducted at the source. This alone, in my opinion, stamps its signal inferiority to income-tax. The great merit of income-tax, and particularly on unearned income, is that it is to so great an extent levied automatically without any possibility of or temptation to concealment or undervaluation. Death duties no doubt depend upon inventories of estate given up by the individual taxpayer. But the successor cannot get possession of the estate without such inventories, and the transfer of property from a deceased person

to his successor is a much more public fact than the continued possession of property. Super-tax again depends on the taxpayer's own statement, and it is argued that a return for a Capital Levy would probably be made with greater care than one for super-tax. But in the case of super-tax temptation to fraud is less. It extends to the taxation of a single year only. To escape the tax permanently, in whole or in part, would require an annual repetition of the fraud. In the case of a Capital Levy it is to depend largely on the taxpayer's own honesty whether he is to pay once for all an amount that must affect his position in perpetuity.

Have the advocates of a Capital Levy reflected what is involved in valuing at one moment the whole of the £15,000,000,000 of private wealth in the country? Those who have to do with valuing the estates of deceased persons know what is involved. Fancy valuing in one year the contents of every dwelling-house in the country, or even, if you like, of the dwelling-house of everyone who would come under the Levy. Or take the case of the owner of a "one-man" business. On the death of such an owner every item of his business, plant, stock-in-trade, book debts, has to be separately enumerated and valued by an expert.

We have not far to seek for a proof. I refer to the ghastly fiasco of the valuations under the Finance Act of 1910. I know that these valuations contain a great deal more than the ascertainment of the actual selling value. Still it should now be evident that the simultaneous ascertainment of the selling, or "total," value of every parcel of land in the country is inherently impossible.

I know it is said that the checking of the returns could be spread over a term of years, and the Levy be made on a preliminary valuation made by the taxpayer subject to ultimate adjustment, but unless the preliminary valuation is to be made absolutely at random, the immediate assistance of experts is required. Some sort of expert valuation of the greater part of the land, buildings, furniture, jewellery, the plant, stock-in-trade, and book debts of one-man businesses would have to be made at once. The expense of this to the taxpayer is as much to be counted in as the ultimate expense to the Government. It is probable that fees to solicitors and surveyors in respect of the valuation under the Finance Act of 1910 amounted to a minimum of a guinea for every parcel of land in the country, and, of course, in many cases to very much more. Then what rate of interest is to be paid or exacted on final adjustment? If low, there will be a temptation to under-

valuation. If high, the State will have to pay extravagantly for a few years' use of money.

It is contemplated that, either by exchange facilities or by the demand of those whose War Loan was paid off, the ultimate result would be a simple transference of securities from present holders to paid-off holders of War Loan. This admittedly involves special inducements to holders of War Loan, *i.e.*, an addition to the State's burden. It is equally obvious that many kinds of property that would have to be sold, mortgaged, or surrendered to pay the Levy are unsuitable or unacceptable to holders of War Loan. I need not labour the point, but it is surely obvious that at least a great amount of complication and friction, and probably depreciation of securities other than War Loan, would result before the transfer was completed. Professor Pigou estimates at from 13 to 20 per cent. " trade assets, etc., household goods, and apparel and miscellaneous property." One-fifth of the whole is hardly a negligible proportion, and all these would be difficult either to value or to sell or to borrow upon or to transfer.

Emphasis is laid on the point that the Levy is to be made once for all, and therefore will not have the reactions on production and thrift that it is admitted would follow a recurrent Levy on Capital. But, as Mill said on a similar occasion, it does not rest with you whether your action shall create a precedent. Professor Pigou admits that no Parliament can bind its successor, and that the expectation of a second Levy, with its psychological consequences, is a probable consequence of a first. Supposing we could ensure that there should be no second similar tampering with capital, another objection remains. The proposers of the scheme, I am sure, intend to be as fair as I do myself, but, though they may not recognise it, is there not an element of meanness in their scheme? What is their argument but to say : " We quite recognise that it would never do to say we were going to tax future capital. But present capital, which *ex hypothesi* has come into existence because it has not been threatened, is at our mercy. It is too late now for its possessors to reflect that it is not worth their while to toil and scrimp themselves in order that the State may appropriate a substantial part of the results of their toil and saving." What else does all the talk of the new generation starting free from burdens amount to?

A. A. MITCHELL

AN ESTIMATE OF THE CAPITAL WEALTH OF THE UNITED KINGDOM IN PRIVATE HANDS.

In the vigorous discussion which is now proceeding upon the question of a Capital Levy, various estimates of the capital wealth affected by the proposals have been put forward based upon widely differing estimates of national wealth. The most recent detailed estimate published was made by the present writer in *British Incomes and Property* (1916) for 1914, upon the plan associated with the name of Giffen, and it gave a total of £14,300 million with an indication that the true figure could not differ from that amount by more than £2,000 million. The *probable* margin of error was, indeed, much smaller, and that estimate stood in contrast with others—for which, indeed, no detailed particulars were given—ranging from less than £10,000 million to £24,000 million, and professing to relate to the same subject-matter. However useful "Giffen" and similar valuations may be for particular purposes, they are certainly not capable of use in every connection in which aggregated wealth is under discussion, or without regard to the conceptions of capital involved, and they cannot be applied directly and without considerable modification in the discussion upon a Capital Levy. So far no *ad hoc* investigation of the particular problem has been published,[1] and it is the purpose of this article, not, indeed, to discuss in any way the merits of the proposals, but to ascertain whether any more suitable estimate can be substituted in the interests of relevant discussion and to set out the main outlines of an attempt to estimate the amount of wealth in private hands which would come within the scope of such a tax as it is generally presented.

The ordinary estimates cover three sections: (A) Wealth belonging to the community in a broad sense, and not subject to individual rights of ownership, *e.g.*, Government and municipal property; (B) private wealth capable of absolute individual disposal, *e.g.*, shares in companies; (C) wealth held legally in forms of corporate ownership, intermediate between (A) and (B) and not readily assignable in definite proportions to individuals. In the ordinary computation, the national debt is treated as positive wealth under (B), but as a deduction (or mortgage) from (A).

[1] Since this was written an estimate by Mr. Pethick Lawrence in his book "A Levy on Capital" has appeared.

Obviously, as the national wealth consists normally of the sum of (A), (B), and (C), it must be greater than the private wealth capable of individual taxation, consisting of (B) and a small part of (C) only, but this will no longer be the case when the national debt assumes gigantic proportions exceeding in amount the value of State and local property. In that event, (A) becomes a minus quantity, increasing *pari passu* with the increase in (B) due to this cause, if the whole debt is borrowed at home, and at an even greater rate if there are loans from abroad, while the deduction of the debt as a mortgage may even exceed the sum of (A) and (C). We should, therefore, now expect that the estimate of "wealth in private hands" will begin to exceed the estimates of "national wealth" in the ordinary sense.

There are two available methods of computation of national wealth which fairly cover the whole ground. The first is a capitalisation of profits and sources of income in (B) and (C) supplemented by estimates for (A) and for non-income-producing wealth, and this method is based upon income-tax data (the "Giffen" method). The second, based upon estate duty data, covers (B) supplemented by estimates for (A) and (C). The latter is closer in character to the figures we are seeking, for three reasons, *viz.*: (*a*) the capitalisation is already achieved in the data, (*b*) it represents *individual* wealth at first hand, and (*c*) it covers non-income-producing wealth; but it has the great drawback that the section of wealth "passing" in any given year is a fraction only of the whole, and the precise size of that fraction, or rather the "multiplier" which is required to bring it to unity, is still the subject of elaborate inquiry, and obviously governs the whole estimate based on these particulars. The reason for the wide difference between the results of the two methods has been a vexed question for some years.

It is possible to get at (B) from the income-tax data, by eliminating (C) from the total assessments and capitalising the balance which we may then term B_1: but the income-tax system also furnishes an alternative opportunity for finding the aggregate incomes of individuals, on their personal statements, and an estimate based upon these may be called B_2. Now B_2 is very much less than B_1, but it is greater again than B_3, the personal capital derived from estate duty data.

The complications introduced by war conditions are such that the only possible approach to the question is to ascertain as nearly as may be what the 1914 or pre-war valuation of wealth would have been for the purposes of the Levy as generally put

forward, and then to modify the result for the changes since that date. The pre-war valuation will be an attempt to get the nearest result for the purpose from the estimates referred to as B_1, B_2, and B_3, and then for additional security, and particularly for the sake of those who suspect that both methods give wholly inadequate results, to apply any supplementary checks that may be available, even though they apply over only a part of the field.

I.—*The Pre-War Valuation.*

The limitations of the Giffen valuation have been discussed elsewhere[1] and need not be set out here. It is for the major part a capitalisation of actual profits being made at any given moment on the average prospects of their continuance and it includes nothing for marketable potential wealth which is not yielding a present income of money or satisfaction. By reason of the fact that it capitalises *profits* on their amount ascertained as far as possible at their "impersonal" source, it is necessarily greater than an aggregate of the capitalised *incomes* ascertained at their "personal" destination, *i.e.*, the final user or consumer. It is a matter of importance to find some measure of this difference at the outset by reference to the *aggregate income* brought under review for income-tax, and the aggregate amount of the *total incomes of individuals* returned or returnable by them for that tax. The former is ascertained for the purposes of the normal charge, and the latter for the purposes of various reliefs from the full rigour of that charge, or for a super-tax on large incomes.

	Millions.
The aggregate income returned and chargeable to super-tax for incomes above £5,000 for 1913-14 was	£180
Between £3,000 and £5,000 (see Report for 1914-15)	60
The aggregate incomes of individuals from £160 to £700 calculated upon the abatements, and allowing for those who failed to claim	280
The aggregate of the incomes between £700 and £3,000 not found directly, but by the most generous interpolation (on a Pareto index continuing the £500 to £700 graduation up to £1,000, and the £5,000 to £3,000 graduation down to that figure) would not exceed	240
Total of individual incomes above £160	£760

Now the total sum reviewed for the tax was £1,167 million for approximately the same period, of which £138 million, for repairs, wear and tear, and other deductions, is not actual income, leaving a difference, over and above the £760 million, of £269 million to be accounted for.

[1] *British Incomes*, Chapter XI.

It is partly made up as follows :—

	Millions.
Belonging to people whose incomes are under £160 (and brought under review)	£61
Belonging to charities and other similar institutions and identified	15
Incomes of certain clubs, co-operative societies, certain municipal properties, Crown properties let to tenants, some insurance reserve funds; income paid to foreigners, not exceeding [1]	45
Sums not allowed as deductions in arriving at profits, but incapable of ranking as individual income [2]	30
	£151

We are thus left with £118 million unaccounted for, and a part of this sum represents profits of companies put to reserve for *other* purposes than equalisation of dividends, depreciation, bad debts, etc. If these profits " emerge " ultimately to individuals as bonus shares, they probably do so in a form which does not rank legally as individual " income." It is possible that in the immediate pre-war years the sums so reserved amounted to as much as £30 million per annum. The residuum is untraced. It must be remembered that " source-income " and " destination-income " are not mere alternative expressions for the same fund, and the difference is not solely that of *degree*, due to the human element (which may euphemistically be termed psychological), but is also a difference of *kind*, conditioned by formal distinctions and the legal conventions of taxation. The existence of so large a balance of this character forms an interesting feature to be pondered by all advocates of systems of perfect graduation which involve taxation on individual returns and the abandonment of taxation at the source. The point to be observed here is that the personal income in fact coming out upon individual statements is of the order of 73 per cent. of the total taxed income (£1,029 million) and 86 per cent. of the income that might upon a reasonable view be made liable to individual taxation (£878 million).

If these results were applied to the pre-war national capital, £14,300 million, we must first take out the capital which is not yielding taxable income (*viz.* : income of non-income-tax-paying classes derived from capital £200 million, movable property not yielding income £800 million, Government and local property net £400 million, and capital the income from which is subject to tax evasion, etc.), reducing it to £12,800 million, of which about 86 per cent. would have been *capable* of return upon individual statements of capital wealth. This leads to £12,000 million as the estimate B_1. But unless we can assume that the capital

[1] More fully discussed in *British Incomes*, p. 422 *et seq.* [2] *Ibid.*, p. 203.

declarations would have been more exact or exhaustive than the corresponding income declarations, the actual aggregate returns for taxation would not *exceed* 80 per cent., or £10,250 million—the estimate B_2, after making a full allowance for the effect of reserves upon market values of shares. Adding to this the "non-income-tax" wealth, £1,000 million, referred to above, we have £11,250 million in all as the amount of pre-war capital that would appear for taxation upon individuals in a Capital Levy.

The taxation of income proceeds upon a double principle: it taxes income, wherever arising, which accrues to residents in the United Kingdom, and *also* income arising in the United Kingdom which accrues to persons abroad. As generally presented, the proposals for the Capital Levy rest upon the former principle only, and it is not suggested that persons resident abroad shall be subjected to Levy upon their wealth physically situated in this country, or (as in the case of rubber plantations) physically situated abroad but under collective ownership here. The Capital Levy valuation differs from the full tax valuation in the following respects:—

(1) It does not include the wealth situated or controlled here but belonging to residents abroad.

(2) As it is generally presented the Levy is to be graduated according to individual wealth, and therefore no attempt is made to reach any residuum of capital by taxation of companies "at the source."

(If the Levy simply took a fraction or aliquot part of all classes of capital, *viz.*, ordinary, preference, debenture, and loan and reserves, from each company, and left each company to reduce the individual holdings, the problem of valuation would be simplified, and there would be no evasion, but, of course, graduation would be impeded and the State would have a mass of not very manageable assets with which to pay off State debt.)

The Giffen valuation capitalises the profits of the business, whereas the Levy valuation would, in effect, capitalise the dividend. In the case of two companies, each making £1,000 profit, the Giffen valuation would be the same, say £10,000, but if one is distributing £800 as dividend and reserving £200, whereas the other distributes the whole £1,000, the aggregate market value of the shares in the former will be sensibly less in normal circumstances than the latter. Although the existence of the reserve strengthens the market value, it does not do so to the extent of the full capital in the reserve, a bird in hand being worth two in the bush to the average investor.[1] For

[1] *British Incomes*, p. 414.

this reason the capital valuation of shares may be somewhat less than a valuation of profits. (If it were attempted in the "Levy" to supplement the graduated tax on individuals by a flat rate on the balance of capital in the hands of the company, it could not be placed upon the reserves without deranging the applicability of the market quotation of the shares to the Levy valuation. To get at the true residuum upon which to place the flat rate and avoid this difficulty, it would seem to be necessary to face the formidable task of aggregating the evaluations of different classes of shares and of subtracting the result from a capitalisation of the whole *profits* of the business, which in practice would yield some astonishing and anomalous results.)

(3) The Giffen valuation ignores potential income, *e.g.*, the building value of land now used for agriculture, ungotten minerals, etc. A substantial sum must be added for this purpose.

The capital returnable for estate duty does not differ materially from the usual conception of capital returnable for a Capital Levy, except that the value of real property abroad belonging to British residents would presumably fall to be included in the latter. The highest estimate of pre-war capital wealth in private hands which can be made by working upon the values of estates returned for probate is £10,776 million, or £10,900 million [1] including all small estates. (This represents B_3.) This is, of course, notoriously far short of the figure reached by capitalising the profits assessed to income-tax at the source; but it is more comparable with the £11,250 million which we reach by capitalising the income that is returned by individuals (B_2). To make a strict comparison and reduce the two aggregates to like elements we should add to the valuation by incomes the sums included in the estate valuation for all future sources of profit (building values and ungotten minerals) and deduct from the valuation by incomes all sums accruing to individuals upon real estate situated abroad. It is probable that the difference between the two valuations would not be greatly changed after this had been done.

We may now look at the three chief supplementary or partial checks upon these valuations.

1. *Valuation of Real Property*. Separate estimates are obtainable (*a*) by capitalising the income from real property reviewed for income-tax, (*b*) by "multiplying" the value of real property

[1] See "The Multiplier and Capital Wealth," *Journal of the Royal Statistical Society*, July 15, 1915.

in estates passing annually to find what the valuation would be if all estates passed in the same year, and (*c*) by examining the results of the special valuations for the new land taxes of 1910–11. Unfortunately the data are not *in pari materia.*

The Schedule A (Income Tax) gives a value of £4,507 million,[1] but it does not include the value of land and premises owned and occupied by railways, mines, gasworks, and other similar properties. If this is estimated at 18 years' purchase on the gross estimated value for poor-rate purposes[2]—as the only available indication—it would give an addition of perhaps as much as £850 million (out of the total capital of £1,819 million), making about £5,350 million in all.

The estate duty statistics show that up to 1914 the valuation of realty passing in any year had not exceeded £79 million, and if we add the amount shown in personalty as out on mortgage we get £96 million. Further additions selected from the personalty (such as "share of deceased in real and personal estate as partner in a firm") brings the total to a possible £120 million, and if the multiplier adopted for estates as a whole is, *on an unproved assumption,*[3] applicable to this class of property by itself, we have a total capital value (after adding the mortgages put with building and insurance societies, banks, etc.) of £3,800 million. This total does not include the value of land and buildings *owned* by limited companies (because for estate duty purposes it is covered by the value of shares as a whole), nor of property owned by corporations, which do not die. There are no statistics indicating what this value would be, but reference to the comparative total profits of companies, and to values of trade premises,[4] leads to the view that it could not exceed the £1,550 million margin remaining between the estate duty total of £3,800 million and the capitalisation on income-tax data of £5,350 million.

As regards the special valuation for the new land taxes of 1909, the last published figures are given in the 59th Report of the Commissioners of Inland Revenue. The "*total value*"[5] in provisional

[1] *British Incomes,* p. 404.

[2] *Ibid,* pp. 30 and 471.

[3] The assumption is that the proportion of the realty passing in each age group to the total realty in *all* groups is the same as the proportion of the whole estates passing in each group to the total estates in *all* groups. It is in this section that such disturbing factors as the Settlement Estate Duty have their fullest effect.

[4] *British Incomes,* p. 122.

[5] Before these statistics can be utilised, the statutory definitions and distinctions between gross value, total value, full site value, etc., must be carefully studied.

valuations was £5,267 million, and this represented nearly the whole valuation, as it was stated recently for the Government in the House of Commons that any addition would be negligible. After making allowances for reductions on settlements of the provisional valuations, the net result, including the valuation of the property of statutory companies at cost, might be put at £5,400 million. To this we may add for Ireland (in proportion)[1] £365 million, and for perpetual ground rents, feu duties, etc., £145 million, making about £5,900 in all. Various other minor adjustments would be necessary to bring these different data satisfactorily or exactly into line, but enough has been said perhaps to indicate the *degree* of divergence involved.

It is perhaps worthy of note that the material factor in the land values duties is, for the most part, not the "*total* value," but the site value, which governs the actual liability to duty, and which the owner generally desires to see as high as possible. Moreover, unless an early use of the total value for estate duty purposes is apprehended, he will frequently be content to see a high total value too, for the sake of any bearing it may have upon sale and mortgage values. When we are looking for a valuation which will stand the strain of heavy taxation, we must accordingly not be too ready to abandon indications from sources which are already so used in favour of a more theoretically exact valuation, which is not subject to that precise test. Upon the whole, therefore, one would hesitate to agree that more than £200 million can be added to the Giffen valuation to get the probable result of an *ad hoc* valuation actually bearing the Capital Levy in practice. But, apart from this, there is another important consideration. So far as the special valuation may show that the Schedule A, or the number of years' purchase adopted for the valuation, is deficient in respect of premises and properties belonging to or used in businesses, the deficiency cannot be treated as a net addition to the Giffen valuation, for the profits to be capitalised under Schedule D are *pro tanto* reduced. Thus, if the total profits of a concern are £10,000, of which £1,000 is charged under Schedule A and £9,000 under Schedule D, it is of little avail, for the purposes of increasing the valuation, to prove that the true assignment to Schedule A is £1,200.

2. *The Capital in Manufacturing Industries.* A further auxiliary check upon another part of the capital included in the valuation may be attempted by way of the Census of Production. In a note upon the capital employed in the United Kingdom in industries covered by the Census, the Report (p. 35) gives an estimate of

[1] *British Incomes*, p. 160.

£1,400 to £1,600 million, obtained by using the ratio of capital to net output which has been found to obtain in the United States.

An analysis of the income-tax results, in order to obtain, for 1907, those proper to the industries covered by the Census, has given (with additions for the premises occupied and for businesses exempt from income-tax) £198 million as the full profits, divided in such proportions between companies and private ownership as to lead with the methods and multipliers adopted in the situation (*British Incomes*, p. 405) to a total capital of £1,665 million.

It would indicate therefore that no substantial change is necessary in this section of that estimate.

3. *Capital invested abroad.* Estimates on independent lines have been made of our investments abroad, putting it at some £3,500 to perhaps £4,000 million. (This sum is, of course, not necessarily their actual market value before the war.) In the valuation from the tax data, railways out of the United Kingdom, Indian, Colonial, and foreign securities, coupons and other foreign income,[1] account for £2,900 million, and a further £500 to £600 million (or between £50 and £60 million of profits)[2] is known to be included in "Businesses not otherwise detailed," covering rubber, tea, oil, and mining companies abroad. We can thus account, in the "Giffen" valuation, for £3,400 to £3,500 million of value remaining from the original investment,[3] and even if the tax data had given a valuation appreciably less than that obtained by Sir George Paish's methods, it would be rash to say that on individual returns for a Capital Levy there would be acknowledged a wider range of investment than can be traced for income-tax purposes where assessments are made as far as possible at the source. It is doubtful if there is evidence to justify any addition under this head to the valuation in *British Incomes*.

Altogether the subsidiary checks roughly applied to three different sections of the valuation for 1914 cover a very large proportion of it, and do not in the writer's judgment indicate that the capital in private hands which would have been returnable in practice for a Capital Levy before the war could have exceeded £11,500 million or have been less than £10,500 million.

II.—*The Post-War Valuation.*

We have dealt at some length with known statistical facts supplemented by estimated elements in order to obtain as securely as possible that pre-war basis which is essential to any estimate of

[1] *British Incomes*, pp. 323—404. [2] *Ibid.*, p. 232.

[3] Corresponding to an "income" of £188 to £198 million.

post-war values. It is now necessary to indulge in conjectures as to conditions which will obtain after the war, and here, of course, there is room for the widest differences of opinion. The following modifications of the pre-war valuation are put forward, not, indeed, as prophecies, but as working assumptions and considerations of space prohibit any extended statement of reasons why they have been adopted. After allowance has been made for addition to or subtraction from the pre-war profits or their objective source during the war, the rate of investment-interest has been assumed to remain at the present level of approximately 5 per cent., and where prices are a relevant consideration, the assumption has been adopted that over the post-war years which enter into the purview of a valuation, they will be on an average level 25 per cent. higher than before the war.

Chief Modifications Suggested.

1. *Lands and Farm Capital.* In view of the conditions under which agriculture is being, and will be, carried on, an addition of £250 million (partly in the hands of the owners in increased rents and partly in the hands of tenants as beneficial occupation). A further £100 million on the valuation of existing farm capital and £50 million on the business goodwill.

2. *Houses and Trade Buildings.* After allowing a deduction for repairs in arrear equal to three years' normal repairs, an increase of £350 million on old values and £100 million net for post-war value of war additions, less destruction during the war.

3. *Railways.* A reduction of £200 million.

4. *Consols, War Loan, etc.* Taking the total State debt at, say, March, 1919, at £8,000 million, allowance has to be made for the amount lent by Allied Governments and Dominions and by individuals resident abroad, which would not be shown on the returns of taxable persons. (Nothing falls to be deducted for loans *to* the Allies, for we are not here engaged in ascertaining the net State debt on which the taxpayers have to find interest, and therefore the extent of "bad debts" is not material.) Further allowance has to be made for parts of the debt which stand below par, or have depreciated (*e.g.*, the unconverted pre-war Consols) and for the extent to which the very considerable holdings by companies, etc., will be *imperfectly* reflected in the market values of shares in the hands of individuals, after alteration in dividend and the increased reserves has had its market effect. Although there are several highly speculative sums involved, it seems probable that the net addition to individual returns will be between

£4,500 and £5,000 million, and the latter figure, in a vein of optimism, is the one here adopted. This factor in the estimate which is often regarded as the most certain is actually the most doubtful.

5. *Foreign Investments generally.* A somewhat fashionable estimate of our net sales of investments abroad is £1,000 million. It is possible that not more than £800 million of this would be directly reflected in *individual* investments to be returned for taxation.

6. *Businesses generally.* When a more stable level of prices and profits is within sight, it is possible that the aggregate profit will be in excess of pre-war profits (even after allowing for the loss of goodwill and dislocation caused through the war), but that it will be capitalised on a lower basis, and that in the net result the alteration may not be great, but the conditions are too speculative for any change to be set down.

7. *Income of Non-income-tax-paying Classes derived from Capital.* Looking carefully to the context of this sub-head,[1] and to the pre-war exemption limit, a small increase only can be assigned—£50 million.

8. *Movable Property not yielding Income (Furniture, etc.).* The effect of actual scarcity and the general price level may be reflected in an addition of £400 million.

These adjustments result in a net addition of £5,250 million to the individual wealth which would be both subject to, and likely to be revealed for the purposes of, a Capital Levy as generally put forward by its protagonists. Where the larger adjustments are themselves highly speculative, it would be idle to spend time in the elaboration of smaller features. It may therefore be said (with all the reserve that the nature of the subject demands) that the capital wealth of the United Kingdom in private hands as at March, 1919, which might come practically within the range of a Levy, would be in the neighbourhood of £16,000 million. But it cannot be made too clear that this has no reference to the aggregate national wealth as generally understood.

In conclusion it may be remarked that upon a rough analytical estimate probably 55 per cent. of the total would be susceptible of close or approximate valuation upon readily available lines (*e.g.*, mortgages and loans fixed in amount and fully secured ground rents, and secured investment income subject to market quotations), and the balance of 45 per cent. (*e.g.*, marginal values of property less its charges, ordinary shares, personal property, etc.) would necessarily constitute the real crux of the practical problem.

J. C. STAMP

[1] *British Incomes*, p. 398.

THE TAXATION OF LUXURY.

ADVOCATES of "luxury taxes" were not unknown before the war. Among the Germans, Albert Schäffle in 1894 and Franz Graf in 1905 had urged the development of this type of taxation; and in France in 1895 Louis Courtray published a slender volume on the subject, in which he favoured the extended imposition of taxes upon luxury.[1] But the devouring needs of war finance, and the contrast between the hardships of life at the front and the unaccustomed luxury which war wages and war profits have made possible for many civilians, have combined to give the taxation of luxury an important place in the Budgets of France, Germany, and Great Britain. In each case the new development has taken the form of a tax upon purchases.

France led the way. The law of December 31st, 1917, provided for (*a*) a tax of 20 centimes per 100 francs, or 0·2 per cent. on ordinary payments over 10 francs in amount, (*b*) a tax of 10 per cent. on *dépenses de luxe*. The latter include three classes of payments—those for articles which are classed as luxuries in any case, those for articles which come within the class of luxuries only when their prices exceed certain specified figures, and those for food, drink, or lodging at an *établissement de luxe*. In regard to the second of these classes it should be noticed that the tax is charged upon the whole price of the article and not merely upon the excess of its price over the non-luxury limit. Purchases

[1] *Vide* Albert Schäffle: *Deutsche Kern und Zeitfragen*, Berlin (1894); Franz Graf: *Das Problem der Luxussteuern*, Berlin (1905); Louis Courtray: *Les impôts sur le luxe*, Paris (1895). Schäffle's scheme was apparently for the taxation of articles of luxury in the factories or shops. He says, enthusiastically (p. 427): "Es wäre eine Gebrauchsbesteuerung vor dem Uebergang in den Gebrauch, vor der Zerstreuung in jene häuslichen Möbel- und Kleidermagazine des Salons und der Spinden, eine Besteuerung, die so den ganzen gewaltigen Umfang des Gebrauchsluxus aller Art erfassen und dennoch für den Konsumenten nicht wahrnehmbar sein würde." Graf's book I have not seen: it is not in any of the chief libraries in London. But there is a short account of it in the article on Luxussteuern by Karl Mamroth and K. Th. von Eheberg in the *Handwörterbuch der Staatswissenschaften* (1910), Vol. VI., p. 551; and some additional particulars may be found in E. R. A. Seligman: *Progressive Taxation*, Princeton (1908), p. 6. Louis Courtray shows interest in Dutch and Belgian taxation, and is favourable to the tax on servants proposed by M. Burdeau in 1895, but argues that this tax should be progressive.

made by traders for re-sale are exempt.[2] The French Luxury Tax came into force on April 1st, 1918; but it is retrospective and affects purchases made since the beginning of the year.[3]

The German scheme, which comes next in date, is on similar lines.[4] It provides for (*a*) the increase of the already existing tax on payments (*Umsatzsteuer*, or transaction tax) from 1 per 1,000 to 5 per 1,000, or ½ per cent., (*b*) the extension of this tax to services as well as purchases of commodities, and (*c*) the imposition of a tax on the purchase of luxuries, which amounts to 10 per cent. in some cases and 20 per cent. in others. Some of the articles liable to the 10 per cent. tax are only so liable when their prices exceed those given in the schedule. I have seen nothing to suggest that the tax is not levied, as in France, on the whole price of these articles. The luxury tax is limited to transactions in the way of retail trade (*im Kleinhandel*), but apparently this limitation does not apply to the ordinary transaction tax, which may be levied several times upon the same article as it passes from one hand to another during the various processes of manufacture and wholesale trade.[5] It seems that the law as passed is to have retrospective force in regard to the taxation of luxuries.[6]

The English project is avowedly modelled on the French tax.[7] It is intended to tax the purchase of some articles in all cases,

[2] *Vide* Copy of Explanatory Statement on the French Tax on Luxuries: Ordered by the House of Commons to be printed, May 9th, 1918 [White Paper, No. 57]. In the statement in the text I have omitted some exceptions and qualifications for the sake of brevity and clearness of outline, *e.g.*, payments between 10 fr. and 150 fr. are exempted from the tax of 20 c. per 100 fr. "if no document certifying payment is exchanged."

[3] *The Economist*, June 1st, p. 942.

[4] A full account of the new German tax-proposals appeared in the *Frankfurter Zeitung* of April 18th, and a briefer one in the *Hamburgischer Correspondent* of April 19th. Since then the new taxes have become law, but I have not yet seen a text of the law as passed, so I cannot say whether the text of the proposals as given in the *Frankfurter Zeitung* has been amended to any extent. According to an article in the *Economist* of May 18th (p. 778), considerable amendment of some of the new taxes was expected.

[5] *Vide The Economist*, May 4th, p. 705.

[6] This is implied in a summary which I have seen of Professor J. Stumpf's article in the *Berliner Tageblatt* of June 20th. That the tax should either be retrospective or should be provisionally enforced in the meantime by an order of the Federal Council was demanded by a writer in the *Frankfurter Zeitung* of April 19th on the ground that so much trade in luxury would take place between the announcement and the passing of the law.

[7] *Vide* statement by the Chancellor of the Exchequer in the House of Commons, April 22nd, 1918 [*Hansard*, Vol. 105, No. 33, cols. 716–717]. For details of the English proposals, *vide* Report of the Select Committee: White Paper, No. 101, of 1918.

and that of others only when the defined price limit for the article in question is exceeded. The tax is also to apply to goods, services or accommodation supplied at "places of luxury." The tax is to be levied on the whole price paid in all cases. On the other hand the English scheme is distinguished from the French by the fact that it is not accompanied by a general tax on all payments and by the fact that the rate is to be 2*d*. in the shilling instead of 10 per cent. An important differentia is provided by the recommendation of Mr. F. D. Acland's Committee that, instead of certain hotels, etc., being classed as "places of luxury," liability to the luxury tax should depend on the prices charged at such establishments. It is not apparently intended to make the tax retrospective.

Thus the French taxes are the lowest. The German transaction tax is more than double the French tax on payments; and the rate of the English luxury tax is more than half as high again as the French luxury tax and ordinary tax on payments added together.[8] It has been estimated that in a normal year the French luxury tax will produce a milliard of francs and the tax of 0·2 per cent. a further 300 million francs.[9] The German estimate is, however, only 200 million marks for the yield both of the tax on luxuries and of the extension of the *Umsatzsteuer* to services, though on the other hand the raising of the *Umsatzsteuer* to ½ per cent. is expected to produce an increase of revenue amounting to about a milliard of marks.[10] Of the yield of the English tax no estimate appears to have been published, but in well-informed quarters the hope is entertained that a revenue of from 25 to 30 millions sterling may be received.

A detailed comparison of the schedules of articles classed as luxuries would be inappropriate here; and in a thorough criticism of them it would be necessary to make allowance not only for differences in manners and fashions and the special circumstances of the present time, but also for any other methods by which "luxuries" are being taxed in each country—as, for example, for

8 The Chancellor of the Exchequer said in his Financial Statement: "With regard to the amount of the tax, the French rate of the tax is 10 per cent., but they have in addition a tax on retail turnover irrespective of whether the article is a luxury or not. I do not ask the House of Commons to adopt that tax. I propose, therefore, to [? impose] a purely luxury tax on rather a higher scale of duty than was taken by the French Government. The rate which I propose . . . is twopence in the shilling, or one-sixth of the amount" (*vide ibid.*, col. 717). As $\frac{1}{6}=16\dot{6}$ per cent. and the two French taxes together amount to 10·2 per cent., it is rather difficult to understand what exactly is implied by the word "therefore" in this passage.

9 I am indebted for these figures to M. Avenol, of the French Ministry of Finance.

10 *Vide Hamburgischer Correspondent*, April 19th.

the liquor duties, the entertainment tax, the game licences, etc., in Great Britain. At the same time the main points of likeness and difference between the three schedules may be indicated, as they have considerable importance for the general criticism of the taxes. Jewellery, motor-cars (for passengers), motor-boats, and antiques are classed as luxuries, whatever their price, in all three schedules, but the English list makes an exception in the cases of plain wedding rings and of taxi-cabs, motor omnibuses, doctors' cars, etc., and the German, in the clause which deals with antiquities and objects of collection, contains the saving clause " so far as these objects are not usually collected chiefly for scientific purposes (*zu wissenschaftlichen Zwecken*).[11] Billiard tables and their accessories, perfumes, live game, hunting garments, liveries, and liqueurs are classed as luxuries in the English and French schedules irrespective of their price, but none of these articles appears in the German list at all. Paintings, drawings, and sculptures are essentially articles of luxury in the English and French classification : for the Germans these things are " luxuries " only when their price exceeds 300 marks. In each country there is exemption for works of art sold by the artist himself, and under certain conditions this exemption is extended, in the German scheme, to near relatives and, in the English, to the artist's agents or executors. Furs are classed as luxuries apart from price in the English and German schedules, though the German plan excepts sheepskins and fur trimmings. In France furs are only subject to the luxury tax if their price exceeds 100 francs, or 50 francs in the case of " pelleteries." Horses, ponies, donkeys, and mules for pleasure purposes are essential luxuries in France. They do not come into the German scheme at all; and only horses whose price exceeds £150 are classed as luxuries by the English Committee. The French and English schedules treat pianos other than upright pianos as luxuries whatever their price, but in Germany only mechanical *Spielwerke* such as gramophones, pianolas, " orchestrions," and their accessories are treated in this way. According to the French scheme an upright piano or a harmonium is a luxury when its price exceeds 1,200 francs, and other musical instruments (including phonographs, gramophones, etc.) are luxuries if more than 150 francs is paid for their purchase. In the English scheme gramophones, etc., are essential luxuries, and non-luxury price limits are fixed for upright pianos (£40), harmoniums (£20),

[11] Jewellery, precious metals, etc., and goods plated with precious metal form the class which is taxed at 20 per cent. in the German scheme.

violins (£7), and other musical instruments (£1). In addition to the mechanical *Spielwerke* mentioned above, the Germans apparently only subject pianos and harmoniums to the luxury tax, and these only if the price is more than 1,000 marks. Small arms (*Handwaffen*) are in any case luxuries in the German schedule, and sporting guns are similarly treated by the French; but in the English scheme firearms are only treated as luxuries when the price exceeds £15. In regard to goods which are to be subjected to the luxury tax if sold beyond a certain price, the most noteworthy point is the tenuity of the German and the length and elaboration of the English and French schedules. Furniture, china, pottery, glassware, and clothing figure largely in the latter; but the German tax does not touch these goods at all, except in so far as some of them might come under the heading of antiques, and except as regards clothing made of fur. The only textiles in the German list are carpets and tapestries—*Teppiche, einschliesslich Wandteppiche*—costing more than 200 marks. On the whole the resemblance between the French and the English schedules is considerable, though the former tends to be less detailed and discriminating—making no distinction, for instance, between boots and shoes. Cigars, cigarettes, and tobacco figure in the English, but are absent from the French scheme, no doubt because of the Government monopoly. A curious difference, in which national prejudice seems to show itself, as in the case of horses, lies in the fact that the luxury price-limit for a dog is 40 francs in France, while Mr. Acland's Committee proposes to fix it at £5. Books other than limited fine editions are not subject to tax in France; but the English proposal is in addition to include (*a*) books published before 1870 if the price per volume exceeds £1, and (*b*) books published in 1870 or later if these are bound entirely in morocco or vellum and cost more than £1 15*s*. a volume if of crown octavo or larger size, or more than 15*s*. a volume in the same of smaller sizes. The different treatment of services in the three countries deserves notice. In France payments between private persons and not in the way of trade (*e.g.*, salaries) are subject to the ordinary tax of 20 centimes per 100 francs, while payments for services at *établissements de luxe* are also subject to the luxury tax. The wording of the law is not very clear, but apparently services such as shaving and boot-blacking are not liable to tax in France. In Germany all such services are liable to the tax of ½ per cent. In the English scheme, apart from accommodation in hotels or lodgings, which is reckoned as a luxury if the prices for rooms of different descriptions exceed certain specified sums,

the only services subject to tax are those connected with hair-dressing, which are classed as luxuries if the charge exceeds 4*s.* in the case of women or 2*s.* in the case of men. Lastly, it is interesting to notice one very remarkable feature of the English schedules. The list of "essential luxuries" includes "rents or other payments for netting, fishing, or shooting rights, or accompanying accommodation except where such netting or fishing rights are utilised solely for trade purposes." The extension of the tax from purchases to hirings implied in this clause is obviously more far-reaching than that implicit in the inclusion of expensive hotel accommodation; and it is difficult to see why the principle, once introduced, should stop short at sporting rights. The purchase of a pleasure boat is taxed, but pleasure boats are more often hired than bought, and the hiring goes scot free. It may, of course, be urged that sporting rights are usually hired for a whole season and that the occasional temporary hiring of a pleasure boat, if a luxury, is not an expensive one. But this objection cannot be raised to the argument that it would be logical to include the rent of houses, other than shooting boxes, at least if these are rented for holiday purposes. Apparently, in the judgment of Mr. Acland's Committee, it is luxurious to hire an expensive room for a day or a week, but not luxurious to rent a country house for the whole of the summer or for the hunting season, at least if one furnishes it oneself! This anomaly, however, raises certain questions of principle which had better be considered later.

Only in France has the new taxation had a trial as yet, and though the tax has not even there been in operation sufficiently long for its results to be manifest, the experience gained so far has been anything but encouraging. There has been a storm of hostile criticism. A number of Chambers of Commerce have passed resolutions against the tax, or have urged its modification.[12] It is urged that the luxury tax hits industries which are of great

[12] *Vide The Economist*, June 1st, June 8th, June 29th, pp. 944, 979, 1081. A meeting of the presidents of the various French Chambers of Commerce on June 4th passed a resolution protesting against the tax and urging that, if maintained, it should be limited in operation to the duration of the war and, in the case of luxuries which only come within that class when a price limit is exceeded, should be imposed, not upon the whole price, but only upon the amount by which the price exceeds the non-luxury limit. This last point represents the view of the original Commission which drew up the schedules: the liability of the whole price to taxation was a modification introduced by the Fiscal Legislation Committee of the Chamber of Deputies [*vide* White Paper, No. 57 of 1918, p. 2, § ii]. There seems to be a general impression that the French law will be altered in some respects.

importance to the industrial prosperity of France.[13] It is asserted that it encourages the manufacture of cheap and tasteless articles.[14] "*C'est une prime à la camelote,*" was the exclamation of M. Lucien Hubert in the Senate. It is pointed out that in some occupations it is necessary, in others luxurious, to be well dressed.[15] The retrospective operation of the tax has been criticised with special severity.[16] Difficulties have occurred in the process of determining which establishments are to be treated as *établissements de luxe*. The effect of the tax in increasing the labour of bookkeeping for traders has added to its unpopularity.[17] Attention has been called to the difficulties of administration, difficulties which must clearly have the effect of making the cost of collection very great. Especially instructive from this point of view is the following sentence from an article by a collector of taxes which was published in the *Bulletin hebomadaire de l'enregistrement* :—

"Très humblement, j'avoue que je comprends l'embarras de l'administration et que je n'arrive pas à concevoir comment elle pourra résoudre les difficultés, à mon sens insolubles, que soulève la perception du droit de timbre sur les payements commerciaux et les objets de luxe."[18]

Before the end of May attempts to evade the tax had already attracted the attention of the Government.[19] Lastly, the yield of the new taxation has been disappointing. In the month of June the revenue obtained by the tax on payments (which appears to include the 10 per cent. tax on luxuries) was 11,876,500 francs as compared with an estimate of 25 million francs for that month. In July the yield was 10,306,500 francs as compared with an estimate of over 32 million francs. The Ministry of Finance has thought well to issue a notice attributing this poor yield *aux causes*

13 *Vide Le Temps*, April 10th, May 9th; *cp. The Economist*, June 8th, p. 979.

14 *Vide Le Temps*, May 9th.

15 *Vide ibid.*, April 5th.

16 *Vide Le Temps*, April 10th :—"Les règlements du moyen âge sont de la liberté auprès des chaînes nouvelles. Contre cette solution rigoureuse l'équité, certes, protestait. Des transactions seraient frappées, pour lesquelles ni l'acheteur, ni le vendeur n'auraient pu tenir compte de l'impôt."

17 *Vide The Economist*, June 1st, p. 942, Professor Stumpf, criticising the German tax, mentions the trouble it will occasion to traders; *vide Berliner Tageblatt*, June 20th.

18 Quoted in *Le Temps*, May 28th. *Le Temps* adds: "L'auteur démontre ensuite qu'on aboutira à une inquisition intolérable et à la création d'une multitude d'emplois nouveaux." Prof. Stumpf (*op. cit.*) speaks of the labour the German tax will entail for the Government Departments concerned.

19 *Le Temps* of May 25th publishes a notice issued by the Ministry of Finance which states that certain traders are evading the luxury tax, and threatens severe measures.

passagères déjà signalées qui devaient ralentir pour les premiers mois la perception des recettes prévues.[20]

It remains to consider all this new taxation in relation to general principles. There are two grounds on which it is possible to defend the taxation of luxury. It may be defended as a means to the discouragement of luxury, and that either because certain luxuries are held to be harmful in themselves or because luxurious enjoyments absorb productive resources which might be more usefully employed in satisfying the more urgent wants of persons other than those deterred from luxurious gratification by the tax. On the other hand, luxury taxes may be defended as an instrument for securing revenue from those whose expenditure upon commodities for which their need is small indicates that they have money to spare. From this point of view a tax upon luxury may be regarded as a supplement to the income-tax, intended automatically to level up its inequalities and, like the abatement allowed for children, designed to make the distribution of sacrifice approximate more closely than would otherwise be possible to the requirements of justice. Since the question of harmful luxuries is, apart from liquor taxes, one of no practical importance, one may conclude that luxury taxes stand or fall, on the former ground, according to their success in effecting the diversion of productive resources to more useful purposes, and on the latter ground, according to their efficiency as comparatively anæsthetic extractors of revenue.

The schedules examined above have clearly been drawn up for revenue purposes As regards the English tax the Chancellor of the Exchequer said definitely: "I have put it on mainly for revenue," though he added the qualification, "but I do not think that there is anyone in the House or out of it who will doubt that at a time like this if it can be arranged it is a good thing in the national interest to make it more difficult, apart from revenue, for people to spend money on articles of pure luxury."[21] The inclusion of antiquities and works of art in the schedules of all three countries, the mention of "postage stamps bought at more than their face value" in the English list of essential luxuries,

20 *Vide Le Temps*, July 12th, August 13th.

21 *Vide* Hansard, *loc. cit.*, cols. 716–717. The emphasis is differently laid in the Final Report of the Committee on Commercial and Industrial Policy after the War. The Committee say: "Wasteful consumption can be directly checked by the imposition of duties of Customs and Excise and licence duties upon luxuries. In our opinion taxes of this nature should be spread over a considerably wider field than at present and should be judged upon their merits as checks upon consumption as well as by the amount of revenue produced by them." *Vide* Cd. 9035 (1918), p. 42.

and the lower non-luxury price limit fixed by the English Committee for books published before 1870, prove beyond question that revenue and not economy of productive resources is the aim and object of the new taxation. The price of commodities such as these does not vary with the amount of labour and capital employed in rendering them available for the consumer, and if the aim is to economise labour and capital, there is no point in discouraging people from paying high prices for rare postage stamps, or old masters, or early folios of Shakespeare, or violins by Guarnerius. From this point of view more harm is done by buying three cheap newly-made sofas than by paying £200 for a Chippendale settee.

It is, then, as instruments for raising revenue that the new taxes deserve to be considered; and on this ground several points should be noticed.

1. The main objection to the taxation of luxury as a means of raising revenue is well known. It has been concisely expressed by Leroy-Beaulieu: "Ainsi on se trouve en présence de ce dilemme: avec des tarifs modérés les taxes somptuaires sont peu productives; avec des tarifs très élevés elles le seraient, sans doute, encore moins."[22]

2. The difficulty of preventing evasion and the general complexity of administration attaching to a tax on retail purchases must make the cost of collection very considerable. It should be noticed, too, that the real cost of collection will be very much greater than will appear in the national accounts. For the collection of the tax will depend to a great extent upon the unpaid services of the shopkeepers; and it is only reasonable to regard the additional trouble it will cause to them as being part of the cost of collection.[23]

[22] *Vide* Paul Leroy-Beaulieu: *Traité de la science des finances* [7th edition], t. I., p. 520; *cp.* C. F. Bastable: *Public Finance* (3rd Edition), p. 499; also Adolph Wagner: *Finanzwissenschaft*: zw. Th. (1880), p. 487:—"Denn wegen der Willkühr in der Wahl der Objecte und wegen der leicht drohenden Einschränkung des betreffenden Besitzes sind hohe Steuersätze, deswegen und wegen der meist geringen Verbreitung solchen Luxusconsums ist wieder ein hoher Steuerertrag ausgeschlossen."

[23] As Mr. Herbert Samuel said in the House of Commons, "The Chancellor of the Exchequer has an ingenious idea of turning every shopkeeper into an Exciseman"; *vide Hansard*, Vol. 105, No. 34, col. 876. Mamroth and Eheberg, in criticising the schemes of Schäffle and Graf, lay stress upon the difficulties of administration:—"Allein die praktische Durchführung einer derartigen Luxusbesteuerung, namentlich einer allgemeinen, böte grosse, kaum zu überwindende Schwierigkeiten," *vide op. cit.*, p. 551. Danger of evasion by pedlars in the case of jewellery was remarked upon by several witnesses before Mr. Acland's Committee, *vide* Report, p. 10; *cp.* Prof. Stumpf, *op. cit.* Ease of evasion in regard to furniture is mentioned in the Memorandum by Mrs. Vaughan Nash and Miss Markham; *vide* Report, p. 15.

3. The case for the new taxation rests upon the assumption that the tax will fall upon the consumer, whose luxury is a measure of his ability to bear additional taxation. But this assumption is too sweeping. The normal tendency of a tax on commodities to hit the holders of existing stocks of them at the outset has special strength and importance here. It may be true that the demand for really expensive luxuries is comparatively inelastic.[24] But apart from this limited class of goods the tax will often tend to be paid, in part, at least, not by the wealthy consumer but by the necessitous tradesman. *Ex hypothesi* the need of consumers for articles of luxury is slight : if it were not slight, no one could pretend that the tax had any " anæsthetic " virtue. But the producer's need of disposing of his stock of goods is a very real need, which the rise in the cost of living may have made more urgent. And with regard to certain important classes of luxuries (*e.g.*, antique furniture and old books) it is with the sale of existing stocks and not with the production of newly made articles that we have to do, while shortage of labour and other conditions imposed by war have put many other articles (*e.g.*, pianos) in almost the same position. If hardship caused by the tax should force any of the " producers " of such commodities (*viz.*, dealers) out of business, the immediate consequence would be, not a restorative shortening of supply, but rather a cheapening of the articles in question as the result of forced sales. Again, makers of and dealers in articles of luxury have specialised skill and knowledge in a high degree. Such persons will therefore prefer a considerable loss of profits, or, in other words, will prefer paying a great part, if not the whole, of the tax, to the extreme measure of seeking alternative employment in which the whole advantage of their special qualities would be lost. Thus one may conclude that there will be a distinct tendency for the tax on luxurious purchases to be paid, in part, at least, in many cases, by the " producer."

4. Evasion of the tax will be easy in regard to commodities which are only classed as luxuries when their price exceeds a specified sum. The effect of the tax in these cases may often be to lower the price of the article until it is just under the prescribed limit. In that event, the consumer will get his luxury cheaper, the dealer will be poorer, and the Exchequer will receive exactly nothing.[25]

5. It is possible that the taxation of luxuries may react to

24 *Vide* E. R. A. Seligman : *The Shifting and Incidence of Taxation*, 2nd Edition (1899), p. 189.

25 *Cp.* Annex to the Chairman's Draft Report : Report of Select Committee, p. 27.

some extent upon the consumers of commodities which are not classed as luxurious. The burden of taxation may, for example, diminish the effective demand for pianos costing more than £40, and people may buy cheaper ones instead. But, as the supply of pianos is practically limited under present conditions, the increased demand for the cheaper classes of pianos will tend to raise their price for everybody. Even when existing stocks are sold and it is a question of newly made articles only, this type of reaction will continue to be felt in regard to goods produced under conditions of diminishing returns, if the demand diverted from the dearer articles of the class is a considerable proportion of the total demand for the class of goods in question.

6. The theory of the taxes is that they will be little felt, since they press only upon luxurious consumption. But it is a familiar maxim of public finance that a small but unequal burden is often more grievous than a heavier burden which either is or appears more equal in its incidence. And, quite apart from the tendency mentioned above for the tax to fall in certain cases upon producers whose taxability is no greater than that of producers in trades unaffected by the tax, the inequality of the taxes under consideration is gross and patent :—

(*a*) There is inequality as between those who indulge in a few expensive luxuries and those whose delight is in a multitude of cheaper articles. " It is difficult," writes Mr. Hartley Withers, " to draw a line between luxuries and necessaries, because the difference is often not one of kind but of number." [26] Obviously a woman who buys two dresses at £7 apiece is more luxurious and is exhibiting more " taxability " than one who buys a single dress for £8; yet under the scheme proposed for this country the latter would be taxed and the former would go free.

(*b*) There is inequality as between those who already possess articles of luxury and those who buy them after the imposition of the tax. If the taxes were imposed only upon articles which are objects of frequently recurrent expenditure (*e.g.*, clothing, cigars, wines, etc.) this inequality would be of comparatively small moment. But when durable commodities—furniture and pianos and such things as people buy perhaps once in their lives—are included, the injustice is serious. Why should the luxury of the newly married be taxed and that of people whose households are already established go scot free? The fact that

[26] *Vide* Hartley Withers : *Poverty and Waste* (1914), pp. 60–61.

the new taxation is imposed only upon purchases has produced the most absurd anomaly in regard to the most typical of all expensive luxuries—the occupation of large and expensive houses. You cannot regard the *purchase* of a house as luxurious expenditure : it may be simply an investment, like the purchase of War Bonds or the purchase of a farm. But you tax the purchase of an expensive meal in an hotel, hence also the hiring of a bedroom for more than a certain price. And, to be logical, you treat lodging-houses similarly. But there you stop short, for to tax the occupiers of houses would be to go beyond the scope of a tax on purchases. And so, if the proposed scheme becomes law, the man who hires expensive lodgings for a week at the seaside will be taxed for his luxury, but the man who occupies a mansion in Park Lane and two or three country houses as well will be entirely untouched by the new tax.

(*c*) It is not, perhaps, straining the sense of "inequality" too much to suggest that the absence of progressive rates makes a tax on luxurious purchases necessarily "unequal." If equality requires the differential taxation of the luxurious, it also surely requires that those who spend a great deal on luxury should be taxed at a specially high rate. But graduation in a tax on purchases is impossible : you could only have a progressive rate on the amount of each separate purchase, and the man who made many small purchases would then have an unfair advantage.

It will be noticed that most of the objections considered above are objections, not to the particular schedules which have been examined, but to the whole project of raising revenue by means of a tax on luxurious purchases. It does not follow that all forms of luxury taxation are similarly objectionable. A great deal might be said for the imposition of really repressive taxes upon a few of the most important luxuries, care being taken to limit the scheme to luxuries which (*a*) absorb productive resources that might serve more useful purposes and (*b*) are susceptible of graduated taxation. A progressive tax on the employment of servants at once suggests itself. The machinery of the National Insurance Act would provide a check upon evasion ; and Dutch experience might be useful in arranging the details. Again, the Inhabited House Duty might undergo radical alteration and development. At present the graduation stops with houses whose annual value is £60, though the value of the houses above this line represented in 1905–1906 (the last year for which I have figures at hand) more than two-fifths of the annual value of all those charged to the

duty. It is obvious that if a man occupies more than one house the value of all those he occupies added together should be the determinant of the rate which he should pay, though it might be difficult to prevent fraud if this was the rule. That some abatement should be allowed for the number of a man's family will clearly be desirable in the cases of both the servant tax and the house tax. In regard to both taxes it may be suggested (*i*) that the object would be not revenue but the suppression of waste and (*ii*) that the present is an opportune time for the initiation of these taxes, because discharged servants would be in no danger of unemployment and the great need for hospitals and convalescent homes would readily absorb any large country houses which might be thrown on the market as a result of taxation.

REGINALD LENNARD

THE COLLAPSE OF THE FRENCH ASSIGNATS.

THE history of the Assignats falls into three periods. During the first, the period before the Terror, the growing inflation worked its full effects under conditions of economic freedom. During the second, which coincides with the Terror, recourse was had to violent measures to counteract the effects of inflation. The third period, which begins with the end of the Terror, saw the discredit and final disappearance of the whole system of the Revolutionary paper money. It is this last phase, which was prolonged over a period of two years and which has received less careful treatment than the others at the hands of historians and economists, that I propose to describe. But before doing so a brief survey of the earlier developments will be useful.

The Revolution originated in financial difficulties. But far from relieving the embarrassments of the State, it only intensified them. Unpopular taxes were repealed. Compensation was voted for feudal privileges abolished. The yield of the remaining taxes dwindled. The provision of the immediate means of payment became urgently necessary. Necker, the Minister of Finance, attempted to borrow, but his loans were little more than half subscribed.[1] In the confiscated lands of the King and clergy, the State had become possessed of a capital asset more than sufficient to cover the accumulated deficits of many years. The *biens nationaux* are believed to have been worth 3,500 millions of livres, while the whole expenditure of the Budget was some 500 or 600 millions, and the deficit for 1789 was estimated at 162 millions.[2] Here was a guarantee of solvency, but the problem was to make it immediately available. A succession of forced sales would sacrifice a great part of its value. It was decided to issue a paper security which could be used in the first instance for paying Government obligations, and could be received in payment of the purchase price of the public lands. First, in December, 1789, came interest-bearing bonds; then, in April, 1790, came legal

1 Stourm, *Finances de l'Ancien Régime et de la Révolution*, II., 253–7.
2 Stourm, II., 274.

tender notes, but still bearing interest. In September, 1790, there followed an issue of paper money pure and simple, legal tender and bearing no interest. By that time the total authorised issue was raised to 1,200 millions. In June, 1791, a further issue—fixed at 600 millions—became necessary. The total expenditure from May 1st, 1789, to July 1st, 1791 (two years and two months), was 1,719 millions, and the revenue only 470 millions, making the deficit 1,250 millions.[3]

In November, 1791, the Assignat was worth 82[4] per cent. of its face value, and with the growing inflation and the approach of war was falling rapidly. War was declared on Austria in April, 1792. In June the Assignat fell to 57, but by the end of the year it had recovered to 72. But the execution of Louis XVI. and the outbreak of war with England in January, 1793, completely demoralised the market. In that month the Assignat fell to 51, in June it was at 36, and in August no more than 22. It is at this point that the Reign of Terror begins and brings with it the period of violent remedies. A decree of April 11th, 1793, prohibited the buying of gold or silver at a premium; all monetary obligations were to be obligations to pay in Assignats, and if payment were made in coin it must be at par. By a further decree, of August, it became an offence to sell coin, or to differentiate between coin and Assignats in any transaction, or to refuse to receive payment in Assignats, or to negotiate Assignats at a discount. By a third decree, of September 8th, the death penalty itself was imposed. The Jacobins, indeed, had replaced the Girondins or moderate party in power for the express purpose of coping with a desperate crisis in internal and external affairs. A strong executive was indispensable, and the Committee of Public Safety, working in conjunction with the National Convention, was given a free hand to regulate every detail of the life of the French people. Depreciation of the paper money was naturally reflected in a proportional rise in prices. In the spring of 1793 the Jacobins, then in opposition, had pressed upon the reluctant Girondin Government a measure prescribing a maximum price for corn, and when the Jacobins themselves came into power the principle was extended by successive decrees to all necessaries, including not only food, but cloth, leather, fuel, wood, etc. (Decree of September 29th, 1793.)

The Jacobins saw clearly enough that if order was to be

3 Levasseur, *Histoire des Classes Ouvrières en France*, I., 152–6.

4 The Schedule to the Law of 5 Messidor, An V. (June 23rd, 1797), giving the average value of 100 livres assignats in specie for each month, is quoted in Courtois' *Histoire de la Banque de France, etc.*

restored in the finances the volume of paper money in circulation must be diminished. The Assignats in circulation, after deducting those withdrawn through sales of the *biens nationaux,* now came to 3,776 millions. Besides other measures, a forced loan, assessed on income and calculated to yield 1,000 millions, was levied. There was no hope of the ordinary Budget balancing, but with these resources the plethora of paper might at any rate be reduced.

France, in return for her fearful sacrifice in submitting to the Terror, received at any rate the advantage of a strong Government, a Government which could organise victory and save the Republic, a Government which could make realities of a forced loan, a schedule of maximum prices, or a legal tender law. The prospects of France and the prospects of the Revolution rose. In November, 1793, the Assignat was at 33, or 50 per cent. above the panic quotations of August. In December it leapt up to 48. Like the low level of August, this rise was in part artificial. Gold and silver themselves were depressed in value in consequence of a law against hoarding. The Government exacted a part of the taxes not in Assignats, but in kind. Other supplies were requisitioned at prescribed prices. Not merely were war supplies requisitioned, but the people of Paris were fed with requisitioned corn. Yet, notwithstanding all the requisitions and transactions in kind a vast expenditure in money was necessary. The emergency measures themselves destroyed enterprise; there were no free markets except for luxuries, and it was no time for luxuries. The ordinary sources of revenue were almost dried up. The administration of the all-important *Impôt Foncier* had been unwisely devolved on local authorities who had no interest in gathering it in. The deficit was made up by incessant additions to the authorised issue of Assignats. Speaking on November 4th, 1794,[5] Cambon, the Minister of Finance, estimated that the expenditure in 1792 had been 1,800 millions, and in 1793 2,000 millions, and that it had risen to 300 millions a month. At that time the Assignats in circulation amounted to 6,400 millions, and they were still worth 24 per cent. of their nominal value.

At last there came a relief of the tension; the circle of enemies was triumphantly broken; it was no longer necessary to subordinate every private interest to the absolute will of the Executive. The Terror, in fact, perished of its own success. Victory brought security, and the remoter the danger the more odious became the butcheries perpetrated by the bitter fanaticism of Robespierre and the vindictive brutality of his evil colleagues. With the fall

[5] *Moniteur.*

of Robespierre on the 9th Thermidor (July, 1794) the Terror ceased, but the military, economic, and political system of the Committee of Public Safety did not immediately come to an end.

So far as the economic system is concerned, the first important step was the repeal of the law of the maximum on December 24th, 1794. Maximum prices have a paralysing effect on trade. No one is willing to sell, and goods have to be wrenched from the dealers' hands and forced into the market by the Government. Let the limitation of price be withdrawn and everyone is willing at once to resume business. But there is no recent experience by which to measure demand, and the result is a bewildering uncertainty of prices and an orgy of speculation.

This is what happened in France in 1795. Even in September, 1794, three months before the actual repeal of the law, there were complaints that the maximum was no longer enforced.[6] At the same time it was said that there were goods in plenty.[7] Once people saw that the maximum simply prevented them from buying, and that if they could evade the law they could have whatever they could pay for, the system was doomed. But the repeal let loose forces the effects of which had not been foreseen. Traders who had been paid in Assignats for all that they had been compelled to sell for eighteen months past, and had been unable to buy anything because no one would sell at the maximum prices, pressed forward to spend all this idle money on replenishing their stocks. In proportion as traders hastened to spend, prices went soaring upwards, and in proportion as prices rose traders became the more eager to turn money into commodities, and to reap the profit of the almost unlimited rise which they foresaw. This sudden dissipation of balances flooded the market with Assignats, and produced a headlong depreciation.

And the depreciation now became directly measurable against specie. For a time, indeed, the prohibition upon dealings in specie remained legally in force. But even before the repeal of the maximum speculators were beginning to sell gold and silver as "nankin" or "muslin," and the police were unable to prevent the traffic.[8] With the repeal of the maximum there came a decree of January 2nd, 1795, permitting the exportation of specie

6 Aulard, *Paris sous la Réaction Thermidorienne, I.*, 91. This work, containing the daily reports of the Paris police on the state of public opinion, etc., together with extracts from the newspapers, provides invaluable material for studying the successive phases of the Assignats.

7 Aulard, September 30th, 1794, and October 9th, 1794.

8 Aulard October 13th, 1794.

provided products necessary to life were imported in exchange. This did not authorise dealings in specie at a premium, but it opened the door to the quotation of specie prices. Once coin had become the legally recognised means of purchasing foreign commodities, its place as a measure of value was re-established, and almost immediately we find evidence here and there that the law against differential prices is being defied, and payment in coin stipulated for. This is still the exception in Paris itself, but it is fast becoming the rule in the country districts, even quite close to Paris.[9]

Till the end of February, 1795, the depreciation though continuous was not perceptibly accelerated. Indeed, whereas the Assignats fell from 28 per cent. in October to 20 in December, 1794, they were still at 17 in February. Nevertheless, this was the lowest point yet recorded, and represented a drop of one-half since the fall of Robespierre seven months before. There had not been so severe a decline since that of the summer of 1793. The Convention turned their attention seriously to the problem at the end of February. Cambon, the Minister of Finance, proposed[10] a lottery on a gigantic scale, and a number of other projects were discussed, all being designed for the purpose of raising a large sum of money in Assignats and withdrawing the paper so received from circulation. The principle was the same as that of the forced loan of 1793, but the magic of decision was gone. The various plans were referred to the Committee on Finance, and while the Committee deliberated the collapse of the Assignat went on apace. By April, when the Committee's spokesman, Johannot, presented its report,[11] the paper money was worth little more than 10 per cent, of its face value. The report embodied a variety of proposals. Its general tendency was towards greater freedom. Bargains were to be permitted in any medium of payment, whether metal or paper; the Bourses in Paris and elsewhere were to be opened; the value of silver bullion in Assignats was to be officially ascertained and published monthly. A final batch of 3,200 millions in Assignats was to be manufactured, not to be immediately issued, but to be held in reserve, and thereupon the plates were to be once for all destroyed. The *biens nationaux* were to be paid in Assignats at their silver value. A land bank was to be started, to issue a new kind of security, *cédules d'hypothèque,* secured on specified portions of

9 Aulard, January 23rd, February 13th, February 18th, 1795.

10 On the 7th Ventose (February 25th, 1795)—see *Moniteur.*

11 On the 26th Germinal (April 15th, 1795)—*Moniteur.*

the *biens nationaux*, not legal tender, but transferable by endorsement, and bearing interest at 3 per cent.

An important instalment of these proposals was passed on April 25th. Specie was declared to be "merchandise." The Bourses were opened. The 3,200 millions of Assignats were authorised (though the plates were not destroyed, and the issue was far from being final!).

The discussion was resumed in May. A member named Raffron put forward a motion that the value of the Assignats should fall automatically by one per cent. every month. This aroused a storm among the Jacobins, and a resolution ruling out of order any proposal in the direction of demonetising the Assignats was carried by acclamation.[12] Perhaps Raffron's motion was not meant too seriously, and the real aim was to outmanœuvre the proposal for fixing the value of the Assignats in silver according to the market quotations. For this latter proposal, which certainly partook of demonetisation, inasmuch as it divorced the Assignats from the money of account and set no limit to their possible divergence, was not further discussed.

The growing turbulence of the Jacobin faction broke out into open violence in the latter part of May, and the discussion on the Johannot report was interrupted. On May 21st, in the midst of the turmoil, according to a brief notice in the *Moniteur*, the law declaring specie to be merchandise was again repealed.

Quiet being restored the discussions on currency and finance were resumed. On June 4th a law was passed authorising the system of *cédules d'hypothèque*. The same law declared that Assignats and coin bearing the stamp of the Republic were the sole legal money. The effect of the various decrees relating to specie is not very easy to unravel. For some reason or other the hasty repeal of the law which made specie merchandise, on May 21st, seems never to have had any operative effect. At any rate, the dealings in gold and silver on the Bourse were in no wise interfered with, and when a law was passed at the end of August giving the Bourses in Paris and elsewhere a monopoly of dealings in the precious metals, *soit monnayés, soit en barre, en lingot, ou ouvrés*, there was no suggestion that transactions not otherwise lawful were being legalised. Finally, on March 12th, 1796, the *Moniteur* again records that "the law which declared gold and silver merchandise was repealed." It is possible that the law of June 4th, which recognised no other metallic money than that coined by the Republic, was interpreted as legalising dealings

12 On May 7th, 1795—see *Moniteur*.

in Louis d'or and écus of the old *régime*, and in bullion and foreign coin. The Republican coinage included no gold and very little silver (only 32,000,000 francs up to May, 1797), and if that alone was not to be treated as merchandise the continuance of free dealings in other forms of specie is explained.

The *cédules d'hypothèque* were a failure. Indeed, what was the use of expecting people to lend with the prospect of being repaid in Assignats? No proposal for borrowing from the public could succeed so long as the lenders had no safeguard against an indefinite depreciation of the medium in which they were entitled to repayment. When the proposal for fixing the value of the Assignat in silver every month was dropped, this part of the Johannot report lost all its utility.

But in any case it was too late. The critical months had already been lost. The Assignat, which had been worth one-sixth of its value when Cambon made his report in February, and one-tenth when Johannot made his in April, was now hardly worth one-fifteenth, and was fluctuating wildly and falling rapidly. The Jacobins, however, remained the champions of the paper money which had saved the Republic. The Convention turned to the public lands which had always been regarded as the security for the Assignats. All that was needed to rehabilitate them was to make them convertible on demand into this security. But it could not be said that the holder of a sum in Assignats was entitled to any definite amount of land. Hitherto the lands had been sold by auction, and the price rose as the Assignats depreciated. No limit could be set to this process, and to sell the land to the highest bidder was undeniably to give less land than had been originally contemplated. The valuation of 1790 afforded a basis for fixing the price of the land, and a decree (May 29th) was passed that it should be sold to the first comer at 75 years' purchase of the annual value of 1790, or, say, three times its capital value. The Church and Crown lands seized in 1789 had been worth 3,500 millions; the lands of the *émigrés* seized in 1792 were worth 2,000 more.[13] The sales up to date amounted to 3,600 millions in *paper* (of which about two-thirds still remained to be paid up.) Allowance being made for the inflation of paper values, the portion unsold might have been sufficient to withdraw many milliards of redundant Assignats. But at the then value of the Assignat the land was being sold at only three years' purchase, or thereabouts, of its real annual value, and for all that the obligations of the State were not being unequivocally met. The Jacobins could

[13] Stourm, *Finances de l'ancien Régime et de la Revolution*, Chap. XXX.

not stand such a sacrifice of the Republic's most cherished asset. The decree was hastily repealed, and the sales under it were annulled (June 7th).[14]

This game of fast and loose was not calculated to revive the credit of the Assignat. On June 7th the Louis of 24 livres was quoted at 585. On the 13th it leaped up to 1,000, on the 15th it dropped to 600, and on the 16th even to 450.[15] The position was becoming desperate. How could paper money subject to such wild vagaries be used as a medium of payment at all?

One of the vices of the situation was that the public revenues dwindled in proportion to the Assignats. It had been difficult enough to collect the taxes, and the arrears were enormous, but when the Assignat was worth only 5, 4, or even 2 per cent. of its nominal value the money was hardly worth collecting. In June an Act was passed making the Assignats pass in payment of taxes for a reduced value bearing the same proportion to their face value as a standard sum of 2,000 millions to the actual amount in circulation (rounded down to the nearest 500 millions). To avoid inflicting hardship on landlords who had to pay taxes on property which they had let on lease, the same rule was applied to rents payable under leases.

Nothing could demonstrate better than the operation of the proportional scale the manner in which the Assignat had lost ground. It was estimated that in 1789 there had been 2,000 millions of specie and 700 millions of paper in circulation.[16] Some of the specie had undoubtedly remained hidden in the country all through the Terror, notwithstanding the law against hoarding. If the gap to be filled by the Assignats in the currency system be taken at 2,000 millions, then the 6,400 millions in circulation in November, 1794, which were worth 1,500 millions at 24 per cent. of their face value, nearly sufficed to fill it. At the time of Johannot's report in April there were about 8,000 millions in circulation, which at 10 per cent. represented only 800 millions in specie. In June there were 13,000 millions in circulation, and the average value of the Assignat for the month was only 3·38 per cent., so that the whole issue was worth no more than 440 millions.

While the Convention had been debating and referring Bills back to Committees, and passing and repealing futile decrees, the Assignat had practically ceased to be a medium of payment, and

14 *Moniteur.*

15 Aulard.

16 Estimate by Maurice quoted in debate of 29 Prairial (June 17th, 1795)—see *Moniteur.* Necker estimated the circulation of specie at 2,200 millions

had become a mere object of speculation. Country people expressed their contempt for the Assignats, calling them "*l'argent de Paris*."[17] The Paris shopkeepers themselves refused to give change for the Assignats of large denomination or sometimes even to accept them at all, on the ground that the country people were refusing to take payment in paper for their produce.[18] The Convention remained in existence till the end of October, but during its last months its attention was occupied in Constitution making and in preparing for the advent of the New Government. Currency matters were allowed to drift, and the credit of the Assignats was not assisted either by the grant of extra pay in metallic value to the troops[19] or by the computation of the legislators' allowances in terms of corn. The premium on specie grew, now rapidly, now slowly; occasionally there was a momentary setback, but never for long. By the beginning of September the high quotation of 1,000, which the Louis had touched during the spasmodic movements of June, had been surpassed. After remaining at 1,100 to 1,200 for several weeks, the Louis shot upwards in the middle of October. The Republic was changing horses while crossing a very torrential stream, and in the last days before the new Constitution, with its *Directoire Exécutif* and its *Corps Législatif* of two Chambers, came into operation, quotations oscillated madly up and down. On October 26th 2,000 was reached, on the 28th 2,750, on the 29th 3,450, on the 30th the Louis opened at 2,600, and on the 31st it was back again at 2,450.[20] The paper money in circulation had grown to 19,000 millions, and with the Louis at 3,000 this was equivalent to only 150 millions of specie.

Writers on the Assignats have made much of the amazing prices at which commodities were bought and sold at this period. Of these it is really enough to say that they were proportional to the rise in the value of specie. In other words, they were fifty-fold their normal level in September, one hundred-fold and more by the beginning of November. These prices were a reality in Paris and in other places where Government disbursements kept up a perpetual fresh supply of Assignats. In Paris the Assignat, "*l'argent de Paris*," really was the medium of payment. But even in Paris a system was growing up of regulating prices of goods by the price of gold as quoted on the Bourse.[21] From fixing differen-

17 Aulard, July 1st, 1795. 18 Aulard, June 20th, 1795.

19 Aulard, July 23rd, 1795.

20 These quotations are taken from the daily record of the Bourse prices inserted in the *Moniteur*.

21 Aulard, Vol. II., p. 470 (December 6th, 1795).

tial prices, the merchants and farmers in the provinces had taken to refusing to receive Assignats at all. The country was steadily restocking itself with metal currency. The quotations of the foreign Exchanges on the Bourse, from the time when they begin in the late summer, consistently show an enormous profit on the importation of gold. The premium on Louis d'or and on foreign gold coin was very much greater than the premium on foreign bills. In September and October the difference was as great as 20 per cent.; till the end of January, 1796, it was as much as ten per cent.[22]

When the Directorate came into power at the beginning of November they turned their attention to the currency. On December 6th they made their first important proposal. There was to be a forced loan, payable in specie or bullion or corn, or in Assignats taken at *one per cent*. of their face value, by which it was hoped to raise 400 millions in specie, and to withdraw 20,000 millions (counting as 200 millions) in Assignats. The Assignats were to become convertible into coin at the same rate of one per cent.; the manufacture of Assignats was to be brought once and for all to an end; the plates were to be destroyed on February 19th. But meanwhile the Government could not be left without any financial resource whatever, and they were authorised to continue the manufacture of Assignats till the total issue reached the fantastic figure of 40,000 millions. Great hopes were aroused, and, when the forced loan decree passed, the Louis, which had been above 5,000, fell in two days to 3,500. The *régime* of the Assignats was clearly coming to its close. The Government was, indeed, still meeting its liabilities in Assignats. Civil Service salaries, however, had already been raised thirty-fold (November 28th). In December it was enacted that half the Customs duties should be paid in coin.[23] The valuation of the Assignat at one per cent. might well provide a bridge by which the Government could return, as private traders had already practically returned, to a metallic standard.

But the Directorate was limited in its freedom by a Legislature predominantly Jacobin. It did not command confidence. The Assignats were still over-valued, even at one per cent., and the Government could not start redeeming them in specie at that rate. Indeed, practically no specie came into its hands. A continuance of paper money in some form seemed absolutely inevitable, and the next step was to devise a new issue of paper

22 For the serious effect of this on English currency, see "The Bank Restriction of 1797" in the ECONOMIC JOURNAL of March, 1918.

23 Stourm., II., 86.

money, which should be absolutely secured against depreciation. The Assignats, though they were supposed to be secured upon the public lands, did not entitle the bearer to any particular share in this security. The new notes, the *mandats territoriaux* (March 16th, 1796) were to entitle the bearer to obtain land *on demand* at the fixed valuation of twenty-two years' purchase of the annual value in 1790 (or eighteen years' purchase for buildings). Though there are plenty of objections to such a currency system, it may be plausibly argued that, so long as the supply of lands remained unexhausted, depreciation would have been prevented. But it was never given a fair trial. The Committee of the Lower Chamber (the Council of Five Hundred) introduced an amendment making Assignats convertible into *mandats territoriaux* at one-thirtieth of their nominal value, and raising the amount of the Mandats from 600 to 2,400 millions to provide for the exchange (with an ample margin!)[24] If one-hundredth had been too high a valuation of the Assignat, one-thirtieth was impossible. The Louis fell, it is true, from 7,000 to 5,300 in one day, and to 4,800 in one day more, but it soon reacted to above 6,000. If it was to be valued in Mandats at 720, there would merely be a repetition of the fiasco of June, 1795, when the Convention, unable to stand the sale of the *biens nationaux* at two or three years' purchase, had annulled the sales retrospectively.

To add to the distrust, the new currency when it came out consisted not of Mandats but of "*promesses de mandats*" (authorised March 19th). "*Rescriptions*," or Government promises to pay cash, were already in circulation at an enormous discount, and promises to pay Mandats could not be expected to fare better. Week after week, month after month, people wondered when the Mandats proper were coming.[25] The *promesses* were given forced currency and could be used to pay the first deposit for the purchase of land, but apparently the Government could not summon up courage to assume the liability to pay land on demand. Meanwhile the quotations of the Mandats fell and fell. At the beginning of April they were worth no more than 20 per cent., at the end of April only 12, at the end of May they fell to 5, recovered to 10 in June, and fell away in July even below 5.[26] Though they were given forced currency, and gold and silver were declared no longer "merchandise," the Mandats never gained the same acceptance as the Assignats. Whereas the Louis d'or was quoted in

24 Voted on 22nd Ventose (March 12th, 1796), see *Moniteur*.

25 Aulard.

26 Aulard. See also Schedule quoted in Supplement to *Moniteur* of October 2nd, 1797 (11th Vendémiaire, An. VI.).

Assignats on the Bourse, it was never quoted in Mandats; the Mandats were quoted in terms of specie, as if they were themselves "merchandise." The Assignats, while they lasted, really were the basis of the money of account; as fast as they lost ground the metallic standard took their place, and a new network of debts and accounts, reckoned in coin, came into being. The Mandats were intended, like any ordinary issue of paper money, to take the place of coin, but no trader who cared for his business would take advantage of the law (March 23rd), which made stipulations for payment otherwise than in Mandats unenforceable in the Courts. There remained for the time being two moneys of account, one following specie and the other Assignats, the two being linked together by the daily quotation of the Louis d'or. But even the fixed thirty to one relation between the Mandats and the Assignats never led to the use of a third money of account following the Mandats.

In currency questions the money of account is fundamental. The difference between high and low prices is in itself one of nomenclature only; it only acquires importance through the relation of prices to pre-existing debts. Even rates of wages, the observed tendency of which to lag behind price movements is one of the most serious evils of inflation, are only a particular case of debts reckoned in the money of account. The contract of service creates a debt every day from employer to employed, and the amount of the debt can only be adjusted to a change in the purchasing power of the monetary unit by a revision of the contract. It is worthy of remark that so long as the Paris workmen were ordinarily paid in Assignats, there were no complaints of unemployment; the high prices (always attributed to the knavery of speculators) were the perpetual grievance. Early in 1796 when the Assignats had almost entirely given way to specie, unemployment becomes one of the chief grounds of discontent.[27] But if wage contracts were not easily adapted to a monetary unit which depreciated by half every two or three months, commercial contracts were thrown into a worse chaos still.

The Convention had not been able to evade this question altogether. In August, 1795, an emergency law was passed suspending the right of redeeming or commuting annual payments, and prohibiting debtors from paying up before the due date. The winding up of the Assignats in February, 1796, necessitated some sort of equitable adjustment of contracts. If the Mandats were to be equal to specie, and debts were to be payable in this new

27 Aulard.

medium, an utterly unfair burden would be placed on those who had contracted during the depreciation to pay in Assignats. If a man had contracted in December, 1795, to pay 10,000 livres in Assignats, then worth about 50 livres in cash, was he to pay 10,000 livres in Mandats three months afterwards? If he was allowed to pay less, what was to be paid by the man who had contracted in December, 1794, when the 10,000 livres were worth 2,000, or in December, 1793, when they were worth 4,800? A law was passed, soon after that authorising the issue of the Mandats, establishing a statutory scale of depreciation. Every debt was to be adjusted according to the rate appropriate to the date at which it was contracted. This was in principle a concession to debtors, and by way of some compensation to the creditors the scale did not at any point allow the full degree of depreciation which had actually prevailed. Thus in March, 1795, the prescribed rate was 40 per cent., and the actual value of the Assignat no more than 13·28. After January, 1796, it was 2 per cent., and the actual value of the Assignat only about ⅓ per cent.

The collapse of the *promesses de mandats* raised the same problem in an almost more acute form, since the fall to 4 per cent. was accomplished in only four months. In July it was decided that the Mandat should thenceforward be accepted even by the Government only at its market value, which was to be periodically announced officially. At last a law of February 4th, 1797, demonetised all the paper money remaining in circulation, and permitted the Mandats to be received in payment of taxes and of instalments on the purchase of the public lands at 1 per cent. of their nominal value.[28]

The adjustment of debts was not finally provided for till the law of October 6th, 1797, which enacted that obligations incurred between January 1st, 1791, and Mersidor 29th, IV. (July 17th, 1796), should be reduced to their value in metal, according to a table of depreciation scheduled to the law. This differed from the law passed in March, 1796, when the Assignats were wound up, in that it took the metallic value and no more as the basis of the debt.

One effect of the failure of the *promesses de mandats* was that a large quantity of Assignats remained in circulation. Apparently the amount in circulation at any one time never actually reached the authorised maximum of 40 milliards. The highest is said to have been 32 milliards. The result of the forced loan was disappointing; up to January, 1797, only 6¾ milliards had been

28 Stourm, II., p. 327.

received.[29] A considerable proportion of the Assignats ought, therefore, to have been exchanged for *promesses de mandats* at the ratio of 30 to 1. But there was no profit in doing this, and much of the issue remained outstanding till the general demonetisation of paper money in February, 1797.

The end of the Mandats was the end of the Revolutionary paper money. But that did not mean that the Government paid cash. Contractors received "*ordonnances*," the holders of *rentes* received two-thirds of their capital in "*bons des deux tiers mobilisés*" and interest on the remaining third in "*bons d'arrérages*"; requisitions for the army were paid for in "*bons de réquisitions*." All these were obligations to pay in cash, but obligations with no definite date of maturity. Sometimes by corrupt means the holders could get them paid on grounds of "urgency." Sometimes they had to wait. Like the Assignats and Mandats, these instruments could be used in payment for the *biens nationaux*. Like them they depreciated (though not quite to the same extent). But there was one vital difference; they were not legal tender. Contracts were made exclusively in metallic money, and the vagaries of Government finance no longer deranged the money of account. Thus was the way prepared, amid all the financial humiliations of the Directorate, for the sound system inaugurated by Napoleon.

Much has been written of the fallacies inherent in the issue of the Assignats. They were supposed to be "based" on the public lands, but were not, in fact, convertible into land or anything else of value. There was no definite relation between the total value of the public lands and the total amount of the circulating medium which the French people needed. In reality the sale of a capital asset like land is as much limited as the issue of loans in its power of attracting *bonâ-fide* savings from the public. The failure of Necker's loans in 1789 proved that surplus savings were not available, the ordinary revenues were drying up, and inflation was the sole resource remaining for providing the means of payment. While the history of the Assignats illustrates almost every possible phase in the abuse of paper money, the period of their decline is in some ways the most interesting and instructive. It is almost unique as an instance of the currency of a great nation gradually fading away into nothing. It is really astonishing that the agony should have been so much prolonged. How did it come about that when the Assignat fell in four months from 17 per cent. to 3·38 per cent. of its value people still went on using it? The

29 Stourm II., p. 384.

Government, of course, insisted on paying in paper, but how was it that people were induced to accept it (apart from the unfortunate *rentiers*, who had no choice)? Probably the explanation is that some people were willing to speculate on the Government being induced to do something to save the Assignats. The Jacobins always remained faithful to the currency of the Revolution. Ordinary political leaders are fairly free to change their minds, and nobody blames them much for dropping a policy for which they have striven in the past. But a faction which has enforced its policy by bloodshed cannot so easily disavow its past. To admit that all or any of the causes for which 20,000 men and women were done to death was wrong is to assume too great a burden of guilt. The Jacobin leaders probably did not like being called "drinkers of blood" by their opponents, and this was an unpleasantly effective political cry. To retain their self-respect they were impelled to contend that what they had done had been really necessary, that the measures taken during the Terror had saved the Republic, and that any evils that had followed were due rather to the weakness of their successors than to their own errors. From the obduracy so thrust upon them sprang that loyalty of the Jacobins to the Assignats which gave hope to the speculators. The *rentiers*, contractors, Government servants, and others who were paid in Assignats would not keep them longer than necessary; even a week's delay might cause a perceptible loss. On the Bourse and at the bucket-shops of the Jardin Egalité those who were in haste to rid themselves of this tainted paper could deal with the speculators, who were prepared to buy it up on the chance of political favours from the Jacobins. The outcry against speculators was incessant and intense. But it was only the speculators who gave any support at all to the Assignats, when everyone else was discrediting them by spending them the moment they were received.

The Jacobins made more than one effort to justify the speculators' hopes. The ephemeral decree of June, 1795, for the sale of lands at seventy-five years' purchase of the value of 1790 was one example; the exchange of Assignats for Mandats at the ratio of one to thirty was another.

We have seen how the aggregate metallic value of the Assignats in circulation shrank. From 1,500 millions in November, 1794, it had dwindled a year later to 150 millions, and at the end was hardly 100 millions. Even of this reduced total the greater part had probably by that time found its way into speculative holdings, so that the quantity kept for currency purposes must have been very small.

R. G. HAWTREY

REVIEWS

A Levy on Capital. By F. W. PETHICK LAWRENCE. (London: George Allen and Unwin. 8vo. 94 pp. Price 2*s*. 6*d*. net.)

THIS is a crisp and clear statement of the case for a levy on capital. In spirit and treatment it closely resembles Professor Pigou's article in the ECONOMIC JOURNAL for June last, though there are differences of figures and of detail which cannot be brushed aside as unimportant. The conclusion is that "with the exception of the *rentiers* and the very rich the levy will bring about a distinct improvement in their net incomes." By *rentiers* are meant those with a capital of £50,000 or upwards yielding interest presumably at 5 per cent.

Assuming the State debt after the war to be £6,000 millions net, it is claimed that this could be wiped out by a levy which at a flat rate would be 38 per cent. A scale is drawn up graduated from small beginnings to 62 per cent. on millionaires. By "capital" is meant material property, including jewellery, furniture, clothing, &c., but not the capitalised value of earned income. In other words, brain capital and muscle power would not be brought under the levy. A hypothetical post-war Budget is framed. The annual expenditure is estimated at £750 millions, and it is maintained that to balance the Budget we shall, on the basis of existing taxation, need an income-tax of 7*s*. 6*d*. in the £ on unearned income, with doubled death duties and a supertax increased in proportion. After the levy the income-tax could be reduced from 7*s*. 6*d*. to 3*s*. 6*d*. A smaller levy would, of course, give less relief to income-tax. But it is suggested by other advocates of the levy that if half-measures prove satisfactory there will be a strong case for whole measures.

If, as Mr. Lawrence thinks, an internal debt is no burden upon the community—which in one sense of the word "burden" is a truism and in another sense untrue—why is it essential to pay it off at once by a colossal levy? Impatience of debt is a healthy sentiment; and after the war the reduction of national debt will be the plain duty of statesmen. But the question how fast and by what methods the debt is to be reduced is one of expediency which

must depend upon our financial position, our needs, and our resources, not yet to be forecast with precision. The debt charge will be heavy, war pensions will be considerable, the housing problem will be expensive, the cost of clearing up, of making good depreciation, and of getting into working order generally will offer serious problems to Government and to business men. What will be the capital and the aggregate income of the community when peace comes, what its distribution, what the course of prices and the state of credit and business? What is the incidence of taxation on its present basis, and what are its defects? All these are essential considerations, not to be airily dismissed as mere details which do not affect the argument.

It is urged that without a levy on capital we must have a crushing income-tax, inimical to production and to saving, that the income-tax has its anomalies and injustices, and that accumulated wealth must come to the rescue. Moreover, "speaking broadly, the distribution of wealth will be still more unequal when the war ceases than it was when it began, for the small number of rich men will retain most of what they had before, and in addition will have added the right to participate, because of their holdings of War Loan . . . in a great part of the wealth which future generations will create." This last statement seems to be against the weight of evidence. Without going so far as to say that "speaking broadly" the war has made the rich poorer and the poor richer, we must at least demur to the suggestion that an investor in War Loan does more than convert from one form to another—and not always a more lucrative form—his right (or power) to participate in future wealth.

It may be conceded that property must be taxed as well as income, and this is already, though somewhat capriciously, done by the death duties. Be the distribution of wealth what it may, there is nothing illogical or unprincipled in resorting to the fund as well as to the flow of wealth to meet the needs of the State; but the balance must be held between the net advantages of taking more or less, and the distribution must be fair. These are the weak points of the proposals. What is wise and what is fair needs further discussion.

Limits of space preclude such a discussion in this notice. Assuming that we have a scheme for the simplification and reform of the income-tax, a proposal for the valuation and taxation of capital as such, framed after a study of Dutch and other precedents and an estimate of receipts and expenditure on the basis of present taxation, shall we be forced to the conclusion that

a levy on capital on "heroic" lines is the only practicable course? The cost of housing is estimated by Lord Selborne's Committee at 100 millions sterling for England and Wales alone, and the needs of Scotland and Ireland are stated to be still more urgent. Mr. Leslie Scott, one of the Committee, thinks the sum mentioned will provide at most for rural housing south of the Tweed. But this expenditure will yield some revenue, possibly enough to cover the cost. War pensions, which will chiefly benefit the poor at the expense of the rich, will be a diminishing charge, and so long as they exist will affect the alleged altered distribution of wealth. A statement of the total wealth and income of the population and the distribution of these resources, together with an estimate of the incidence of present taxation, will make it possible to envisage the fairness of present and future taxation. A tax upon property, as such, sufficient to redeem year by year 50, or 100, or 200 millions of debt is surely preferable to an additional tax of 6,000 millions at one stroke. I am asked to pay £100 to the State forthwith because I have certain furniture, books, pictures, clothing, etc. Why? Because the State is thereby relieved of the necessity to find £5 a year for the fundholder. But if I say " Be content. Take £6 or £8 or £10 a year instead of a lump sum of £100," it is clearly good business for the State to accept the annual payment. Time is money. To give the taxpayer time may help him without detriment to national finance. Modern life and modern business are very complex affairs. To thrust the big indiscriminate hand of Government into this delicate machinery with a demand for enormous sums at a time when we are being bled white is a hazardous procedure. The placards which tell us " It's safe " in War Loan will provoke cynical comment if the public feel that " It's safer " in a stocking or buried in the garden. " Never again " is an easy assurance, but history shows how dangerous a thing it is to make the taxpayer afraid to disclose his wealth. If the plea for an enormous levy led to a secretion of money, its consequences might be so serious as to require another chapter in the next edition of this work. The probable reactions of various kinds have not yet been adequately faced.

HENRY HIGGS

The Economic Causes of War. By ACHILLE LORIA. Translated by JOHN LESLIE GARNER. (Chicago: Kerr. 1918. Pp. 188.)

THE first edition of this book was published in 1912 under the title *Les Bases Économiques de la Justice Internationale.* It was reviewed by Mr. Norman Angell in the ECONOMIC JOURNAL, 1913.

A further notice is now called for by the addition of a substantial supplement on *The Lessons of the Great War.* The translator has adopted a title appropriate to the present form of the work. Indeed, the original title was not well adapted even to the first edition. The contents would have been better indicated by the title which Mr. Norman Angell suggested: *The Operation of Economic Factors in the Evolution of International Society.* In that evolution as conceived by Professor Loria there are three stages. First, economic relations give rise to international law. At a later stage international law breaks down under the strain of opposed interests; and still later it is rebuilt by economic influences. It is with the second and third stages that we are here concerned. The newly added supplement purports to be a verification of certain generalisations relating to those stages.

The thesis that wars are wholly due to economic causes has one of its ablest advocates in Professor Loria. It is impossible within our limits to do justice to the learning with which he supports this thesis. It must suffice to cite some of the instances on which he relies. "Most of the wars of Athens were caused by the necessity of securing additional lands." "In Rome the Third Punic War was merely a revolt of Latin property, determined to repair its diminished revenues." "The sole purpose of the Crusades was to increase the income of European feudal lords at the expense of the Syrian or Oriental revenue." "The struggles of Pisa and Florence, the Italian wars of the fifteenth and sixteenth centuries, were due to economic causes." "Holland's struggle for independence against Spain was in reality simply a privateering war on the Spanish merchant marine and the Hispano-American colonial trade." "The war of England against Napoleon was merely a reaction against the Napoleonic conquests, which threatened British commerce." If the adverb "simply" and its equivalents were omitted, these propositions would appear less *simpliste.*

As the ancients attributed destruction and preservation to the same Power, so Professor Loria teaches that economic action, which at one stage is the sole cause of war, tends, at another stage, in various ways to establish peace. One way is presented by the analogy between industrial and international disputes. Workmen will accept an arbitrated decision even when it grants them an increase of wages less than what they might have secured by fighting, less by an amount less than the cost of fighting. Similarly "if the demands of the stronger State are represented by 1,000, and it appears to be in a position to obtain this by means of a war

whose cost may be represented by 100, the arbitrators must allow him (*sic*) $900+d$; but if the cost of the war would be 300 (we omit some decimals) the arbitrators may grant him $700+d$ without any fear that the stronger State will reject the arbitrated award." Whence it follows that with the increasing cost of war the concession which must be made to force becomes smaller. The "zone of arbitration," in Professor Pigou's phrase, becomes smaller. Professor Loria has expressed with great clearness a conception which Professor Pigou had introduced (in his *Industrial Peace,* 1905) in a mathematical form. The conception has been employed by the present writer (in 1915) without acknowledgement, because without knowledge, of Professor Loria's work. We have not space to quote the passages which show that Professor Loria has a just sense of the differences as well as of the similarities between industrial and international disputes. (See his pages 151, 152, 154, 157.)

Among other ways in which economic influences tend to minimise war the "internationalisation of the Labour movement" is emphasised. There will arise among workmen of different nations "a solidarity which will constitute the strongest guarantee for international peace." But the author does not predict the total cessation of war—at least, while the present capitalistic system, with its so-called "forced association of labour" (pp. 132, 162, 179), perniciously persists.

Such are some of the generalisations which it is the purport of the new Supplement to test. As to the economic origin of war, the writer finds that the statements made by him in 1912 have been confirmed by subsequent events. The Balkan war was fomented by foreign manufacturers of armaments. "Serbian pork, Bulgarian wheat, and Greek commerce were the factors underlying the great and so-called religious movement against the Moslem." As to the European war, "the desire to find a lucrative employment for capital in new countries was the real underlying cause of the horrible conflagration," as pointed out by THE ECONOMIST (November, 1915). The testimony of Mr. Brailsford, of Pope Pius X., and other authorities to the same effect is cited. The author appears to attribute economic motives to the belligerents on both sides indiscriminately. He wrote his *Supplement* before the Americans came into the war, otherwise he would probably have adduced the Crusaders of the twentieth century as verifying his thesis: the sole motive for their intervention the desire for wealth! But perhaps the thesis does not imply that all parties to a war on both sides are actuated solely by economic

motives. We think that this implication, if not intended, should have been more explicitly disowned.

With regard to the deterrent effect of anticipated cost, Professor Loria dwells on the fact that the cost of the war has far exceeded the expectations of M. Bloch and other prophets. Yet, contrary to their expectations, the warring nations have not been soon exhausted. The enormous cost is, indeed, such as not to afford much prospect of " net gain " to belligerents, even if victorious, in future wars. Yet we may suggest that the difficulty of prediction evidenced by the anticipations about the present war is favourable to the spirit of gambling rather than the cool calculations of economic men.

How about the solidarity between workmen of different nations as a guarantee for peace! What of the German Socialists enthusiastically voting military credits, eagerly supporting a war of conquest! " The refutation of the theory," replies our author, " is merely one in appearance. For a long time the Socialist party in Germany—the same, moreover, as in other countries—has been anything but an expression of the wishes and interests of the proletariat; it has become the fief of certain party leaders, . . . in other words, of a dissatisfied clique of the *bourgeoisie* who are adepts in securing snug incomes for themselves at the expense of their flocks." . . . " Projects for perpetual peace will be unrealisable Utopias until the artificial democracy by which we are ruled is replaced by a true democracy, an actual government by the people. . . . If the sceptre had passed to the costermongers, to the peasants, to the market women, we would have been spared this brutal carnage." So the Bolsheviks seem to have thought. Are they a " true democracy " ?

F. Y. EDGEWORTH

Labour and Capital After the War. By various writers. Edited by S. J. CHAPMAN. (London: John Murray. 1918. Pp. x + 280. Price 6*s*. net.)

YET another " after-the-war " book! Philanthropy, like every other interest, including religion, is profiteering—trying to grab what it can during the war and resolved to hold as much as possible of what it has grabbed after the war is over. The writers of the present book are like all the rest: each of them finds his former opinions greatly confirmed by the experience of the war, and has a cheerful belief that whatever evil legacies the war may leave in other directions, it will do good in promoting or even

enforcing the adoption of his own particular views of what ought to be done. The Bishop of Birmingham thinks " England had got somewhat out of hand before the war. She is now, on the whole, living in accordance with the requirements of a wholesome life, in which each "—with a ration book?—" tries to secure what is necessary, not only for himself, but for others. This must continue." Mr. Clynes says: "All the principal functions of trade organisations must be retained by them. Neither in importance, in service, nor in freedom to act, must Trade Union authority be diminished." Lord Leverhulme believes that " The worst motive a human being can be actuated by, even from his own mere selfish point of view, is selfishness, whilst one of the highest motives, and certainly a heaven-inspired motive, is that of enlightened self-interest. Under the elevating influence of enlightened self-interest, Capital and Labour, employer and employee, can be combined as co-partners to make efficiency and higher production a stepping-stone to greater comfort and happiness." And so on. We may wonder whether, after all, the great problem of the future will be the relations of Capital and Labour. May it not rather be the relations between Debtor and Creditor, or, rather, between those with fixed money incomes from property and those with variable incomes? The various belligerent States have abandoned the gold standard in favour of paper standards which circumstances lead—they say compel—them to keep on depreciating by over-issue. Each of the currencies is depreciated in gold, and gold itself is greatly depreciated by its disuse as currency. The States buy commodities and services at enormously enhanced rates, and, borrowing for the purpose, bind themselves to pay annual interest in pounds, francs, marks, dollars, and the rest. General wages and prices have risen to levels corresponding with the depreciation, and many of the increases have with amazing folly been adopted in legislative enactments intended to govern the future. Will not the really great economic question be what the pounds, francs, and the rest are to be worth after the war? The interest of the States, considered as Government machines, will be in favour of keeping down the value of these monetary units or lowering it still further, inasmuch as the predominant function of government will be the collection of money to pay the State creditors with, and it is clearly much easier to collect any given sum in taxes if the unit in which the sum is reckoned is of small value. Against this will be arrayed the holders of national obligations, reinforced by the whole body of other *rentiers* in the strict sense, holders of debentures, preference

stocks, chief rents, and such-like things which cannot possibly benefit by high prices, and by a contingent of workers and pensioners and workers whose incomes are more or less difficult to move. Who will say with certainty what the result of the conflict will be, or whether, when the depreciators have won, they may not in the end throw away their success by over-issuing to that excess which leads to the non-acceptance of the issue and a consequent fresh start? Anyway, it is certain that there will be a period in which the value of the monetary unit will not have even the moderate amount of stability which it had before the war. This lends additional interest to the Editor's proposal for arrangements under which reconsideration of wage-rates fixed by collective bargaining or other organised methods would take place as a matter of course at definite periodical intervals, so as to avoid the friction caused when reconsideration can only occur on the demand of one party, which is consequently regarded by the other party as opening hostilities. If the standard of value is to shift about more than ever, this scheme might be useful because it would not only make the wages of each industry vary with the prosperity of that particular industry, but would also adjust wages generally to changes in the value of the monetary unit, commonly called changes in the cost of living. It would, of course, require the abandonment of the pernicious practice of endeavouring to settle wages for long periods into the future which inevitably leads to disputes embittered by allegations of bad faith.

EDWIN CANNAN

The Economics of Progress. By the Right Hon. J. M. ROBERTSON. (London: Fisher Unwin. 1918. Pp. ix + 298. Price 12*s*. 6*d*.)

THIS book consists in the main of lectures delivered to the Political and Economic Circle of the National Liberal Club in October-December, 1917, and has the defects which might be expected from such an origin, being neither suitable for the purely practical uninstructed citizen who never heard of Ricardo and Marshall, nor for the modern student who is left quite cold by Jevons' attack upon and Marshall's apology for Ricardo—an apology which Mr. Robertson in the robustness of his faith treats as another attack.

In the preface and here and there in the body of the book Mr. Robertson tries to resuscitate the doctrine which he rashly taught in 1892 in his *Fallacy of Saving*. At that time it may have been

almost excusable to be driven by reaction against the Smithian doctrine of capital setting industry into motion (J. S. Mill's "industry is limited by capital") to the equally wrong doctrine that accumulation of capital takes away employment. But the Smithian doctrine has long ceased to find any place in economic teaching. It is recognised that the amount of employment is altogether independent of the amount of capital, that the workers use tools and stocks instead of being put in motion by them. So that there is no longer any excuse for advancing the wholly untenable proposition that much saving means "under-consumption and consequent unemployment" (p. 255). No doubt sharp changes in demand may cause unemployment, but to suppose that there will be less employment because people demand factories and houses instead of beer and cinematograph exhibitions indicates considerable detachment from the progress of economics.

We may doubt whether Mr. Robertson is altogether sound on some other fundamental parts of economic theory. Suspicion is excited by his complaint on pp. 78 and 79 that the census of production shows that "large numbers of workers who would be classed without question as 'productive' create wealth only a very little in excess of their own earnings." The excess of product over earnings is rent and interest, and why should there not be large numbers of workers engaged in kinds of production in which labour plays a very large part in comparison with land and capital? We read on, hoping that we have been uncharitable, till we reach p. 109, where we find: "It is now recognised that Ricardo was perfectly right in saying that labour's increased share, as wages, is gained from profit's share—that is, from the *rate* of profit; the rate of profit per unit of production having undoubtedly decreased even while the totality of profit increases with the increased application of capital." Is "labour's share" here an amount or a proportion, and is "labour" workers in the aggregate, so that the share of labour is the total income of all labourers taken together, or is it wages in the ordinary sense—earnings per man? And how can wages in any reasonable interpretation of the term gain at the expense of a *rate* of profit—a percentage? And what is the "unit of production"? The passage smells rankly of the old confusion between the rate of profit—the percentage obtained on capital—and the proportion of produce falling to the capitalist.

Mr. Robertson strongly deprecates alarm at the diminution of natality. It is doubtful if he recognises how enormous is the reduction of natality involved in the fact that the absolute number

of births in England in the four years before they were cut down by the war (1911–14) was actually less than it was in the four years 1876–9. He argues that alarm is unnecessary because the diminution is counterbalanced by the reduction in child mortality. A table on p. 271 shows the reduction in the absolute number of births in 1906–10 as compared with 1901–5 to have been more than counterbalanced by the reduction in infantile mortality, so that though fewer were born, 4,000 per annum more reached the age of twelve months. But if the next four years had been added, as they might have been without entering on the war period, corresponding figures would have shown this trifling margin swept away and replaced by an adverse balance. A few pages further on an even more unhappy attempt is made to show that diminution of births is much more than balanced by reduction of mortality under the age of five. The author says: " Because the annual number of births fell from 948,000 in 1903 to 872,000 in 1913 "—obviously a slip for 1912—" the Board of Education announced, on April 10th, 1913, that despite the great fall in the death-rate, 'there is no such diminution in the child mortality as would counterbalance the effect of the diminution in the birth-rate.' " He denies this flatly, but instead of considering the actual decline of child mortality which had taken place, he expects to disprove the Board's statement by quoting estimates of the numbers of children of five years old alive on April 1st in 1903 and 1913 as respectively 704,896 and 767,987, which would be very telling if only the 704,896 were the survivors of the 948,000 babies of 1903 (instead of being, as they were, the survivors of 918,000 babies of 1897–8), and the 767,987 had been the survivors of the 872,000 babies of 1912 (instead of being, as they were, the survivors of 929,000 babies in 1907–8). He cannot have asked himself the simple arithmetical question what decline of mortality would be required in order to provide even the same number of survivors from 872,000 as from 948,000, to say nothing of increasing them from 704,896 to 767,987. If there are 705 survivors left out of 948, the loss is 253 per thousand: to leave as many as that out of 872 the loss must drop to 192 per thousand, and to leave 768 out of 872 it must drop to 119 per thousand. Moreover, supposing the diminution of births has been compensated by diminution of child mortality, what answer is that to those who are alarmed at the tendency of natality to decline? Diminution of child mortality cannot possibly cope in the long run with a decline of natality proceeding at a uniform rate. The possibility of countering a decline of births by a reduction of child mor-

tality obviously diminishes as the child mortality falls. When the child mortality is 500 per thousand, a fall of 10 per cent. in the births can be met by a fall of child mortality to 444 per thousand, which looks possible enough; but when five more successive reductions of 10 per cent. in the births have taken place the possibility of countering is exhausted, as the entire disappearance of the child mortality will not meet a further 10 per cent. reduction. Alarm may be unnecessary, because of the high probability that when population becomes nearly stationary natality will cease to fall, or will rise if that is then necessary in order to keep population from serious decline. But the alarm cannot be allayed by Mr. Robertson's method.

EDWIN CANNAN

Die Geldvermehrung im Weltkriege und die Beseitigung ihrer Folgen. By ROBERT LIEFMANN. (Stuttgart and Berlin: Deutsche Verlags-Anstalt. 1918. Pp. 199.)

OF late there has arisen in the Central Empires a school of economic thought which preaches that the gold standard is unnecessary and that a paper currency need have no gold cover. Of that school Professor Liefmann is the prophet, and his book, published in 1916, on *Money and Gold* purports to furnish the scientific basis of the new doctrines. In his latest publication he considers the problem of inflation, and he claims to be the first writer who (1) has urged as a matter of the most vital necessity for Germany's economic recovery the reduction of prices to their pre-war level, and (2) has shown that the existing high prices in Germany are among the principal causes which have produced the present decline of the mark exchange.

Professor Liefmann has nothing very new or very startling to say about inflation. His main thesis is that notes require no gold cover; they may be equally well covered " by staple raw materials, of which it would be well to have considerable stocks laid up in case war broke out—*e.g.*, copper, nickel, cotton, and so forth," and continues: " It is not by any means an unsound principle to issue bank notes on the security of good commercial bills." The author never once considers that perhaps gold possesses certain qualities which fit it to become the note cover *par excellence*. He will have none of it, because it is responsible for a state of affairs which enables the gold-producing countries, and England in particular, to influence the internal circulating media of other countries.

The scientific value of Liefmann's arguments may be gauged by two illustrations. To the criticism that the abolition of the gold standard will be impossible without the formation of an "Anti-Gold League," and therefore of an understanding with other States, Liefmann replies: "I think this is quite unnecessary. The example of Germany, which in this war has produced an abundance of evidence of her strength and has solved so many new problems, will suffice to induce other States to imitate the harmless measure of abolishing the free mint." As a rule Liefmann's work deserves consideration. In this little book, however, he is less of an economist and more of a German propagandist. The cloven hoof, indeed, appears towards the end of his book, where he declares outright that if the gold standard is abolished, England will be hardest hit, and that would be "our reprisal for her destruction of our foreign commercial organisations in almost all countries . . . for which even in the most favourable peace we shall be unable to obtain full compensation."

Yet, though Liefmann does not love England, he has nothing but praise for her war finance, which he urges Germany to imitate. England, he points out, has made efforts to pay for the war by taxation and by loans; Germany's policy of relying on loans alone is responsible for the prevailing high prices. "If our expenditure in the second half of 1917 amounts to 3·4 milliards of marks monthly, that is, over 40 milliards of marks per annum, and only 25 milliards of marks is the maximum yield of the War Loans, it follows, unless the difference is covered from other sources of income or from new taxes, that an inflation of credit with or without notes is inevitable." But in Liefmann's view this is not the only weakness of German war finance. It was a mistake, in his opinion, to have set up the War-Loan Banks. It was folly not to have made efforts to raise loans abroad. The cry of joy that German money remained in Germany—an argument used in support of all the War Loans—was due to ignorance of the most elementary economic laws. The War Loan added to the currency; therefore it helped to send up prices; and as high prices in Germany are responsible for the falling mark, the War Loans are among the causes of the adverse rate of exchange.

On the basis of this argument it stands to reason that the main efforts of the State in the transition period after the war should be directed to reducing prices. Only if that is done will the mark exchange recover. But Liefmann is not blind to the fact that other causes also affect the rate of exchange—*e.g.*, sympathy or antipathy, the news from the front, etc. Hence it is

necessary for Germany to impress neutrals with her strength by insisting among other things that England shall hand over the assets belonging to Germans which she holds, amounting to some 125 millions sterling. " In any event, of course, England must be forced to deliver up this property." If England refuses, she must be threatened with a continuation of the submarine war.

Amid bushels of self-praise, criticism of opponents, much repetition, and no little propaganda, Liefmann's book contains about two grains of economic doctrine, which may be summarised as follows: After the war the gold standard must be abolished. This will be easy to achieve since the gold standard no longer exists. The inland circulation of gold will be a luxury "which we shall be unable to afford." The regulations governing the issue of paper money must be abolished; the experiences of the war period have demonstrated that a paper currency even without a gold cover finds ready acceptance.

Perhaps there is good reason for these demands; perhaps the new doctrines have much in their favour. But the unprejudiced reader will hardly find in Liefmann's latest book a case made out for their adoption. It must be confessed that as a contribution to economic science the value of the book is small. Yet it is useful in its way since it shows what prominent German economists are thinking about one aspect of *post-bellum* reconstruction.

M. EPSTEIN

Principii di Economia Commerciale. By GINO ARIAS. (Biblioteca di Scienze applicati al Commercio.) (Rome: Società Editrice Libraria. 1917. Pp. 948. Lire 25.)

The Lecturer on Commercial Studies at the Genoese Royal Institute, and Professor of Political Economy at the University of Genoa, has chosen a subject appropriate to his office and surroundings. The central part of the work—or at least that part in which the interest of the English reader will probably centre—is the sixth part, dealing with commercial policy. But, apart from that main theme there are good discussions of various topics—much excellent fruit outside the kernel. The voluminous treatise contains matter of three sorts not often presented simultaneously—economic history and abstract theory in addition to commercial policy. The *millesima pagina* which according to Juvenal is characteristic of historical compositions is almost literally attained by a volume which comprises, besides history, two other ingredients abounding in a variety of topics.

In the first part of his work the learned author traces the development of exchange from its early obscure origins. He next surveys the economic *régime* of ancient India—the influence of caste, the various forms of interest—here, as with reference to other topics, including among his selected authorities what has been written on the subject in the ECONOMIC JOURNAL. Some aspects of commerce and retail trade in ancient Athens are presented with equal lucidity. Passing on to the Middle Ages, we are taught that the "just price" of Charlemagne's capitularies was the value determined by free competition in contrast to monopoly value. The conceptions of just price formed respectively by Albertus Magnus, Thomas Aquinas, Duns Scotus, and some minor doctors present interesting contrasts. In fine, the history of Genoese commerce leads to the conclusion that the earlier State regulation was in substance an insurance against the risk of dearth; when this risk had diminished, it was felt that the price of the insurance was excessive.

We do not feel competent to appraise these interesting contributions to economic history. With more confidence we can praise the *second* part, which deals with value and prices. In criticising this part of the volume the present writer is placed in the position of an examiner who finds in the work which he is examining repeated and appreciative references to his own writings. It is but human to be favourably impressed by such recognition. *Et sapit et mecum facit* is a very natural association of ideas. Not that the critic always expresses agreement, but rather such dissent on minor points as to evidence an independent judgment and so to enhance the value of his appreciation. Thus, referring to the ECONOMIC JOURNAL, Vol. XXI. (1911), he admits that the principle of monopolistic discrimination resulting in benefit to consumers may play a large part in modern industry. But he will not admit that the principle is relevant to a Socialistic *régime* (*loc. cit.*) For "in a Socialist administration there is not and there could not be a monopolist such as we now conceive." Which is, of course, true of ideal Socialism. In all such discussions much turns upon the degree of abstraction presupposed. Perhaps we may thus explain Professor Arias's seeming dissent from the views expressed in the ECONOMIC JOURNAL (VII., p. 403, VIII., p. 234, IX., p. 286, X., p. 288) as to the tendency of a specific tax to raise the price of a monopolised article. We are quite at one with our author as to the decisive importance of future interest on the motives of the monopolist (Arias, p. 137, ECONOMIC JOURNAL, XII., p. 512). As to transactions between

two monopolists, the so-called "duopoly," Professor Arias, in support of the present writer's view, contends that it is not fair to "introduce extraneous elements" into the data (Arias, p. 139). Here and elsewhere he shows a just appreciation of the "divergence between the abstract representation and the concrete phenomenon" (p. 149). It is not the fault of theorists, "*i maggiori teorici,*" at least, if others, "*oltrepassando il pensiero dei maggiori,*" do not take account of this divergence.

With such just views as to the function of abstract theory, it is remarkable that our author should demur to Professor Marshall's doctrine of compromise benefit (to monopolists and consumer). This bold (*ardita*) abstraction seems to Professor Arias too far removed from reality (p. 121). "The monopolist cannot and does not value quantitatively the benefit of the consumer at different prices." Equally surprising seems the criticism of another among "*i maggiori,*" Sir H. Cunynghame, with reference to the expediency of an export law (p. 177). "These purely quantitative contentions (*raffronti*) are not an infallible guide." *Quis negavit?* The objections to Mr. Bickerdike's doctrine of incipient taxes (propounded in the ECONOMIC JOURNAL, Vol. XVII.; analysed by the present writer, Vol. XVIII.) appear similarly otiose. The paradox that the advantage generally obtainable by a small import tax tends to be greater (*sic*) when the tax is protective is combated by arguments which are indeed agreeable to common sense and are valid against the statement as it presents itself to the lay reader, but do not touch the theorem as understood by the mathematician.

We have not space to follow our author through the wide range of subjects as to which he displays a minute acquaintance with contemporary writings. His generous recognition is often tempered with gentle criticism. Thus Mr. Keynes is praised for "some truly profound pages" on the discount policy of banks. But the author adds: "*Il Keynes peró non è a mio avviso perfettamente nel vero.*" So with respect to railway rates the "perspicuous thought" of Professor Ripley leads to conclusions that are "not quite acceptable" (p. 813). Plunging into the controversy between Professors Taussig and Ripley about "joint costs," Professor Arias finds that the very acute English writer through excess of subtlety deviates from the truth (p. 825). The general impression produced on us by this elaborate criticism is that the Genoese students of political economy are singularly fortunate in their teacher. One who has read almost everything that has been written on each subject, and has marked what he considers

amiss in each writing, who is ready to compare and correct the theories of his contemporaries, must prove a most effective and stimulating instructor. Maturer students may perhaps find that the judgment which they had formed on each question is not materially altered by the new dialectic; but this circumstance does not detract from the educative value of these critical expositions.

This general character appears to apply to that part of the work which is specially concerned with the controversy between free trade and protection. The cruder presentations of either doctrine are ably criticised. If any freetrader is foolish enough to argue that, because Italy relaxed protection in a certain year and enjoyed prosperity in subsequent years, *post hoc* is *propter hoc,* he may be convinced of his error by our author's sound logic (p. 772). It is good also for extreme protectionists to learn that there have been "deplorable exaggerations" on their side (p. 794), that *in general* it is the better course to leave to customs tariffs a purely fiscal function (p. 179). Coming nearer to practical issues, we think that our author has made some contribution (p. 605) towards the definition of "dumping"—dumping of the malignant sort, against which it is generally agreed that some protective measures may legitimately be employed. He well distinguishes the phenomenon of plural price which is an incident of monopoly and joint production from penetration in a political interest as practised by the Germans. But there still remains the difficulty of proving that in any given case the more dangerous kind of dumping is present to a serious extent. For example, with respect to Italy before the war it is not enough to say: "The importation of machines represents for Italy an annual tribute of more than 200 millions [of francs] due to a foreign industry." Professor Arias, indeed, says more than this, but he does not in our judgment adequately counteract the presumption that to obtain a large addition to the means of production is advantageous. Before accepting him as a guide we should require more information about particulars. Consider, for instance, the following contention (p. 795): "A nation is an *historical* category. National interest (*convenienza*) has necessarily an historical character, is not immutable, but continually changeable, is complex and inseparably compounded of multiple elements," and so forth. With respect to such propositions one may sympathise with that cautious student of whom it is told that he would not assent to the axioms of Euclid until he knew what use was to be made of the admission.

F. Y. EDGEWORTH

A New Way of Housekeeping. By CLEMENTINA BLACK. Collins. 1918. 3*s*. 6*d*. net.

THE development of housekeeping on the lines of modern industrial methods has been broached in the last twenty years by several writers, among whom Mrs. Perkins Gilman was perhaps the most startling and provocative. At first received with incredulity and astonishment, the suggested innovations are now beginning to win acceptance, and the war has brought them well within the range of practical politics. Strong, capable women are now needed in many occupations necessary to the nation, and the traditional methods of running the home are seen to be wasteful, using up an amount of energy and effort out of all proportion to the results achieved, and retaining the services of many paid and unpaid workers who are badly needed for other work. The root of the matter lies in the application of scientific method. Both in matters of cleanliness and in the choice and treatment of food, science is needed. But it is impossible to expect every individual home-maker to have this scientific knowledge and training, the advantage of which can only be enjoyed by groups larger than the family. It may be said that housekeeping cannot be turned into a factory industry, and that we do not all want to live in hotels or hostels. The author of *A New Way* contemplates no such violation of fundamental human instincts, and herself lays stress on the desirability of co-operative, rather than business, management. Domestic federations of grouped households, the members electing their committee, and the committee selecting or discharging the staff necessary to do the catering, cooking, housework, and table service required—these are the main points of the proposals outlined in Miss Black's admirably clear and concrete scheme. In regard to details, as, for instance, whether meals should be taken privately or in common, or whether provision should be made by the federation or within each family for the education and nurture of the young children included, the author wisely advises the uttermost possible liberty of choice and freedom for experiment. It is impossible not to feel that the adoption of such methods would greatly diminish the social cost of housekeeping, and also set free valuable energies to assist in getting done the vast arrears of work that lie before us in the future.

B. L. HUTCHINS

The Conflict of Tax Laws. By ROWLAND ESTCOURT, Ph.D. (University of California Press. 1918. Price $1.25.)

THIS noteworthy and praiseworthy essay in finance, dated March 1st, 1916, was printed in the University of California Publications in Economics for April, 1918, and is now issued as an excerpt with an index.

The casual critic might complain, as the young woman did of *Hamlet*, that it is " so full of quotations "—no fewer than 194 in 110 pages. But it is a sign of grace in the author that he has the honesty and the modesty to acknowledge his authorities instead of concealing them and paraphrasing them. The important matter is that the quotations are worth making, are well in their place in the procession of the argument, and are frequently from sources not easily accessible to ordinary readers. Their value is enhanced by the setting of comment in which they are embodied; and the whole work is typically American—fresh, incisive, direct, and modern.

The problems of Federal finance, in themselves becoming serious, are complicated by the bewildering chaos of State finance. Doctor Estcourt sees clearly that the defects of the present systems must be made clear to the public in order to secure the driving power to reform, and that expert advice must be taken before reform is carried out. He contemplates inquiry in each State by a jurist, an economist, and a Treasury official—he does not add an accountant—who should pay regard to historical, legal, economic, and administrative considerations and should, after comparative study, meet for the consideration of points of agreement with a view to co-ordination. The author does not shrink from stating clearly his own conception of the important factors in tax reform. Though sometimes open to question his views are presented with ability, and the essay as a whole is stimulating, suggestive, and practical. In spite of the quotations it is singularly free from well-worn generalities. When the urgent problem to which it calls attention is attacked this essay should be found very useful. Apart from this it deserves the attention of all students of finance.

HENRY HIGGS

NOTES AND MEMORANDA

RUSSIA'S AGRICULTURE AND THE REPAYMENT OF FOREIGN LOANS.

DURING the last years before the war the annual exports of raw materials from Russia totalled, roughly, Rs.1,500,000,000, and her imports Rs.1,000,000,000.

At the same time Russia's foreign indebtedness amounted to Rs.4,500,000,000, but this has now been increased to Rs.16,000,000,000.

For the repayment of her foreign loans, including interest, an annual expenditure of, approximately, Rs.1,000,000,000 will be required, which sum can only be paid out of the excess of exports over imports, and this implies that her exports must be increased by at least Rs.500,000,000.

Russia's exports, as is well known, consist mainly of cereals and of raw and semi-manufactured products. Excluding live-stock, food-stuffs alone formed three-fifths of the total export. The annual export of cereals between 1909 and 1913 averaged 12,000,000 tons, to the value of Rs.675,000,000, the total production of cereals in Russia reaching 47,000,000 tons. Thus the export of cereals represented a quarter of the total production in Russia.

The low level of agriculture determined a very poor crop, averaging only 40 poods per dessyatine (*i.e.*, 490 lb. an acre), whereas in England the average is 149 poods, in Germany 140, and in France 80. If Russia's method of cultivation could be improved to the French standard, as should not be difficult, she would increase her total output to 94,000,000 tons; thus, even if the consumption of cereals inside Russia increases simultaneously by 50 per cent.—*i.e.*, from 35,000,000 tons to 52,000,000 tons—she should be in a position to export 42,000,000 tons of bread-stuffs to the value of about Rs.2,300,000,000—twice as much as will be necessary for the annual payment of her foreign debts.

The attention of economists and industrialists should be drawn to the problem of increasing Russian agricultural production. This is Russia's real gold-field. Indeed, the output of metal gold in Russia averages only Rs.70,000,000, which is only one-fortieth

of the value of bread-stuffs annually produced in that country. Should the conditions of the world's demand for bread-stuffs after the war not allow the immediate export of as large a quantity as Russia can produce, then, while this period lasted, Russia could increase, out of her accumulated bread-stuffs, stock-breeding and the production of other food-stuffs (dairy produce, eggs, and meat), which will always continue to be in great demand abroad.

Bearing this in mind, one would suggest that the primary object of the economic policy in Russia should be the development of intensive methods of agriculture, as being the simplest and surest way of increasing the wealth of Russia.

During the past twenty years a great change in the economic life of the peasants has been apparent, for whereas they formerly produced principally for their own consumption, they have latterly catered more and more for the market. This change was accompanied by a great tendency to pass to intensive culture and by an acute demand for well-organised agricultural credit, intensive culture necessitating costly agricultural machinery. This demand up to the present is met almost exclusively by the rural co-operative societies. In 1902 the total number of rural co-operative societies was 1,625 : by 1917 it had reached 46,057; but notwithstanding the important strides made by the co-operative societies in Russia their numbers are not yet large enough nor their capital anything like adequate to provide for any considerable improvement in agricultural conditions. The speedy increase in their number, however, is remarkable and may be considered as a direct indication that the general transition to an intensive method of cultivation in Russia is a matter of the nearest future.

Another sign pointing in the same direction may be found in the steady increase in the import of agricultural machinery into Russia :—

Year.	*Imported Agricultural Machinery, in cost.*
	Rs.
1906	18,350,000
1907	20,885,000
1908	25,600,000
1909	37,657,000
1910	38,932,000
1911	52,199,000
1912	56,624,000

In 1906 agricultural machinery occupied the eighth place in the list of imports, but by 1912 it had risen to the second place, the first being held by cotton; this was due to the increase during the same period in the import of agricultural machinery by from

300 to 400 per cent., while that of other goods increased by only 48 per cent.

The increase in the home production of agricultural machinery during the same period corroborates the above figures. In the beginning of the period it amounted to between Rs.10,000,000 and Rs.20,000,000, while during 1912 agricultural machinery to the value of Rs.52,600,000 was manufactured in Russia.

Agricultural science has not yet reached the highest level and there is room for it to work miracles in the near future. There is, indeed, great promise in the fact that, side by side with the farms which yield only about 40 poods per dessyatine (*i.e.*, 490 lb. per acre), there are others which give 240 poods per dessyatine without any sort of manuring but after only an early ploughing.

Since the vast agricultural population of Russia (80 per cent. of the whole) is made up of small holders, it is a practical impossibility for the majority of them to own the necessary machinery for intensive cultivation of their fields, and the conditions of Russian peasant life would render it necessary that such implements should become the property of the rural societies, Zemstvos, co-operative societies, or individual owners (other than peasants), who would lend them to the peasants on credit terms, utilising as far as possible the manual labour of the peasants and receiving the hire in cash or in corn after the crops have been gathered.

The soil is in many regions so minutely divided that such machines as tractors with three or four ploughs attached would be too bulky to be of any use, and it would, therefore, be necessary to use small tractors with one plough only.

During the next twenty-five years the demand for agricultural machinery will continually grow, and the import and home production of it will involve the expenditure of many hundreds of millions of roubles. Such outlay will be eminently productive, and therefore it may be hoped that the necessary capital for supplying agricultural machinery on credit will be easily found.

The certainty of profit to be derived from organising credit for the Russian peasants in order to improve their production, the vastness of the sums demanded for that purpose by the population, the system of short credit which will be sufficient, the long period of years during which the demand for that credit will steadily increase—all these are extremely favourable conditions which should prove that the organisation of a big agricultural bank in Russia would be timely and successful.

These conditions also prove the possibility of organising the insurance of crops, estimates being calculated on the methods of

cultivation employed. The insurance of crops combined with the organisation of the hire of agricultural appliances would again give a strong impetus to the development of intensive cultivation and scientific agricultural methods.

Having in view the importance of the problems involved in a scheme of harvest insurance and the high return of any capital invested in such an undertaking, it is suggested that this insurance should be a Government enterprise, such suitable State organisation tending greatly to facilitate the repayment of foreign debts.

The statistics here employed and the conclusions arrived at are based on data which refer to the Russia of pre-war geography, for the political, economic, and popular interests of the different parts of Russia are so closely interwoven that their confederation in one form or another is inevitable after the war. Moreover, I deal exclusively with the agricultural potentialities of Russia and with its transition to intensive culture, which concerns principally those Russian regions which will never cease to be Russian. Regardless of the political configurations and inter-relations of these regions, they will always have to bear their share of the burden of the old Russia's foreign loans.

E. Hermonius,
Formerly President of the Russian Government Committee in London.

Extracts from German Periodicals Relating to the War.

The relief of disabled soldiers is a subject which receives much attention. Thus a Bremen journal records of the local Committee appointed for that purpose that relief measures took the form of vocational advice, training, finding situations and financial assistance, while the Committee also gave advice in matters relating to pensions and other legal and economic questions, provided clothes and medical treatment, looked after families, co-operated in providing resources for the acquisition of small-holdings or homesteads, arranged for composition grants and took similar economic measures. Professor Silex in the *Berliner Tageblatt* demands small holdings for blinded men. With a blind man more than with any other man speedy assistance is of the greatest importance for his whole future. A cottage and an acre or so of land will make him and his family content for all time.

The problem of women's work after the war is the subject of an article in *Soziale Praxis* by Dr. Käthe Gaebel. She points out that the restoration of workers to peace employment will, of

course, be mainly the task of the employment bureaux. It is essential that employment agencies which will for the most part be inter-local during the transition period should be so arranged that they will enable the Silesian textile woman worker when dismissed from the munitions factory to proceed to some other place of employment, or, where possible, to her own home. At all costs she must be prevented from wandering about out of work or from swelling the numbers of the proletariat in large towns, which presumably will still have their power of attraction. The prohibition of night work, work on Sundays, and overtime, ought to take place at once, while the elimination of women from employments injurious to health ought to be put into force at latest within three months. Government orders which can be executed by women and are not for technical reasons bound to be carried out in any one definite locality should count as emergency work and be placed with workers who need them. In all cases where the provision of work such as has been described cannot be arranged, relief for those out of employment will be indispensable. The question of relief presents difficulties. Thousands of women and girls, after the return of the breadwinner of the family or the restoration of other sources of income, will no longer be forced to work for pay. Ought they then to be allowed to have a claim to unemployment relief?

The increase of State maternity grants is demanded by Frau Clara Schlossmann in *Schmoller's Jahrbuch*. The birth-rate before the war reached nearly 2,000,000, and on the estimate that three-quarters of the mothers will require State aid, a far larger sum will have to be put aside for the purpose than is assigned at present. On the basis of the figures in Düsseldorf, where in 1916 the amount granted to 714 maternity cases averaged Mk.128, the yearly expenditure in the Empire would reach Mk.180 mill. An Imperial grant will be required. It is difficult to apply a system of compulsory insurance. All who think they can dispense with State aid will decline to pay, and those who fail to pay their subscriptions to it will be excluded from the benefits of the Act. Any legal compulsion, as in cases of non-payment of taxes, will be expensive and unpopular. Another objection to compulsory motherhood insurance is that the women only are liable for the cost and not the men who as fathers ought to share the burden.

Germany's war bill is discussed by Georg Bernhard in *Plutus* for June and July. For disabled soldiers and dependents he reckons two milliards of marks (£100,000,000) per annum, as follows: The number of the killed may be estimated at 1½ million.

Among the dead are a considerable number of young men whose death does not make the State liable to give any kind of relief. The number of deaths which make the State liable to grant relief may be taken at one million. To this a further million may be added of men disabled in such a way that they may claim permanent support, and the sum of Mk.1,000 may be taken as the average sum to be given to each individual. It follows, then, that at first at least Mk.2 milliards annually will be required. This sum will presumably reduce itself quickly, owing to the mortality of the pensioners. On the other hand, in the case of soldiers' dependents it must be remembered that the number of war marriages of young people has been extraordinarily large, and that accordingly provision will have to be made for many young orphans and very many widows. This, however, may be compensated for to a certain extent by the fact that owing to the large number of war marriages of young people many of the widows will remarry, and so forfeit their pensions. In spite of the reduced chances of marriage experience shows that, given equal chances, widows marry sooner than single girls. The annual sum of Mk.2 milliards capitalised amounts to Mk.25,000 million. Combining this figure with other items we have the following account :—

	Mk.	
Cost of mobilisation	1,000	millions.
Purely military war expenses	116,000	,,
Cost of feeding the nation and similar charges ...	10,000	,,
Compensation to owners in devastated districts ...	5,000	,,
Reconstruction of the army and fleet	6,000	,,
Pensions	25,000	,,
Total	163,000	millions.

This total (£8,000 million) may be taken as the amount of Germany's war debt on the supposition that the war ends this year.

The demagogic proposal to reduce the interest is strongly deprecated by Bernhard. After the war neutral countries who will have a considerable surplus of capital will be inclined to invest in German Government loans, just as German municipalities and public corporations will obtain considerable loans from abroad. But every credit transaction with foreign countries would appear quite impossible were Germany desirous of repudiating the liabilities arising from the war loans. Firstly, a drastic reduction of the rate of interest on loans would injure very wide strata of the population. The summaries issued of the subscriptions to each individual war loan show that the number of small subscribers has been extraordinarily large on every occasion. Moreover, throughout the war all trust funds of infants, all the savings of

widows and orphans, have been invested in the loans, while many public welfare institutions whose funds benefit widows and orphans, and especially insurance offices, have been very large subscribers. But even that is not the most weighty argument against any reduction of the interest on loans. The German working classes are still more interested in another side of war finance. The success of the loans was largely due to the fact that the ever-increasing scarcity of raw materials in nearly all industrial and commercial undertakings transformed into cash capital which formerly existed in the shape of raw materials, half finished and finished manufactured articles. This capital, thus deprived of its functions, had to be invested, and there was no sounder investment for it than the war loans. At the moment when the German economic system can once more apply itself to peace labours this capital will, of course, once more be transformed into commodities. The prerequisite for the success of this proceeding will be the possibility of converting war loan stock into cash either by selling it or lending it. In other words, on the possibility of obtaining full value for war loan stock depends first and foremost the power of the German economic system to resume its labours after the war.

In the latest *Kriegheft* of the *Archiv für Sozialwissenschaft* (Tübingen) Dr. Carl Erich von Kühlmann, of Berlin, strongly advocates the extinction of the national debt by a single colossal levy on capital. It will prove impossible to go on paying interest, considering the immense outlay required for reconstruction. It is Utopian to expect a development of productive power adequate to the burden. Germany is in the position of a railway of which the profits scarcely suffice to pay the interest on the bonds. Such a concern is best put into the hands of a receiver; in order that the over-capitalisation may be written down, the "water" squeezed out. The objection that means of production would be withdrawn from private hands is treated as fallacious. Likewise the objection that the formation of capital would be discouraged is said to be illogical, since it is equally applicable to a heavy income-tax. The objection that the valuation of property would be impracticable is met by the arrangement that the owner should value the property, the State having an option to buy it at that valuation. The contribution will be made in war stock or by handing securities or goods to the State. There should be a steep graduation, the details of which are elaborated in connection with the inheritance tax.

Under the heading *Contemporary Changes in Socialist Ideas*

and Theory Prof. Lederer presents a clear view of the so-called neo-Marxism, of which the most prominent representatives are Karl Renner, Paul Lensch, and Johann Plenge. Renner's book, *Marxismus Krieg und Internationale* is highly praised by the very competent critic for its style and classical form. But Prof. Lederer allows it to be seen that he has not an equally high opinion of the author's logical power and economic insight. Renner insists on the interposition of the State—*durchstaatlichte Wirtschaft.* But he has never thought out the relevant theory of monopoly. He continues to subscribe to the Marxian law of value. Altogether the work is of political rather than economic interest—*es ist ein politisches, ein durchaus untheoretisches Buch geblieben.* Lensch's book *Drei Jahre Weltrevolutions* (1917) obtains even scanter praise. Lensch sees in the war a revolution after the type of Marx' conceptions. Germany is in the position which in the Marxian scheme is characteristic of the proletariate: "its interest is identical with that of all mankind." Germany is like the great men of history, of whom it is said by Hegel that their individual aims contain the substance of the world-spirit's will. As Prof. Lederer comments, the categories of the Socialistic range of ideas are translated into world-politics with wonderful adroitness (*Schneidigkeit*). Only, what remains of Socialism? While the writer goes on talking of England and France and Germany as units he gives up the fundamental conceptions of Socialism. Plenge's book *Die Revolutionierung der Revolutionäre* is even wilder. It will be sufficient to paraphrase the critic's summing up: What mad play of words, what juggling (*Ballspiel*) with ideas! A revision of the Marxian edifice, a fresh testing of his presuppositions, would have been welcome. But Plenge is anything but critical. There is nothing new in his "neo-Socialism," described as "a spiritual and economico-technical thorough organisation of capitalism."

Prof. Lederer also contributes to the *Archiv* an article on *Die Oekonomische Umschichtung im Kriege,* tracing the changes in currency and other economic phenomena which have occurred in successive periods of the war.

Other articles deal with conjuncture in war-time, agriculture in the period of reconstruction, the possibilities of Hungarian agriculture and their significance for Central Europe, (German) newspapers in the period of transition, reconstruction in England (mostly derived from sources which are very accessible to the English reader).

RECENT OFFICIAL PAPERS

Report of Treasury Committee on Bank Amalgamations. [Cd. 9052.] 1*d.*

National Debt. [Cd. 8972.] 1918. The liabilities of the State from 1875–6 to 1916–17 are exhibited.

Report of the Select Committee on the Luxury Duty. No. 101.

Explanatory Statement on the French Tax on Luxury. No. 57. 1d.

Second Annual Report of the National War Savings Committee. [Cd. 9112.] An analysis of contributions to State securities, those of the small investor amounting to £253,000,000.

Sixty-second Annual Report of the Registrar-General for Scotland, 1916. [Cd. 9014.] 1918. The birth-rate was 22·79 per thousand, being 3·69 less than the mean of the rates for the preceding ten years. The proportion of illegitimate births was the same—7·1 per cent.—as on the average for the preceding ten years. The death-rate—14·64 per thousand—is the lowest recorded for Scotland.

Report of the Departmental Committee for Inquiring into the Principles which Should Determine the Construction of Scales of Salary for Teachers in Elementary Schools. Vol. I. (Report) [Cd. 8939], Vol. II. (Evidence and Memoranda) [Cd. 8999]. 1918.

The Committee have considered "whether there is any sound principle underlying the universal practice of engaging women under a scale which is lower than that for men in the same area"; and they do not recommend equal payment as a general principle—with some important exceptions. A memorandum submitted by the National Federation of Women Teachers presents ably the case for equal payment.

Fourth Report of the Central Control Board (Liquor Traffic). [Cd. 9055.] 3*d.* 1918. There has been a continuous reduction in public drunkenness, and there is nothing to prevent the permanent maintenance of the present level of sobriety.

Reports of English, Scotch, and Irish Committees, and State Purchase and Control of the Liquor Trade. [Cd. 9042.] 9*d.*

Trade of India in 1916–17. [Cd. 9067.] 1918. Among general features it is noticed that the monsoon "the jugular vein of Indian trade" was favourable, and the crops better than in 1915–16. Wholesale prices were (in Calcutta) 17 per cent. above the level of March, 1916, and 44 per cent. above the pre-war level. The rise was due not to food-grains, but chiefly to imported goods.

Reports of Departmental Committees appointed by the Board of Trade to Consider the Position of Various Industries after the War.

The Coal Trade. [Cd. 9093.] 4*d.* Output and Cost of Production, Housing Accommodation, Charges for Wayleaves, Support of

Railways and Canals, the Export Trade, Shipping Tonnage available after the War.

The Engineering Trades. [Cd. 9073.] 6*d*. General Survey, Works and Plant, Materials, Manufacturers, Costing, Standardisation, Labour, Female Labour, Higher Technical Education, Finance, Competition, Trade Combinations, Dumping, Patents and Trade Marks, Trade after the War.

The Iron and Steel Trades. [Cd. 9071.] 6*d*. Historical Survey, Survey of the Commercial and Manufacturing Position in the Various Branches of the Industries, Commercial Reconstruction, Iron Ore, Organisation in the Industries, Labour, Protection, Means of Transport, Royalties and Wayleaves, Technical Education, Commercial Intelligence.

Shipping and Shipbuilding Trades. [Cd. 9092.] 1*s*. 3*d*. The German Control Stations and the Atlantic Emigrant Traffic, the Reconstruction of the Mercantile Marine, International Competition and Navigation Policy.

The Textile Trades. [Cd. 9070.] 1*s*. 3*d*. The Textile Raw Materials, General Position and Sources of Supply, the Present Position, Organisation and Future of Each Industry, Plant, Labour, Scientific and Technical Research, Marketing, Transport, the State and Industry.

The Electrical Trades. [Cd. 9072.] 2*d*. National Importance of the Electrical Industry, Electricity Generating and Transmission, Electric Traction, Manufacturing, Financial.

Much valuable information and good advice—briefly indicated above—is given with respect to the internal organisation of the respective trades. There are also some drastic proposals as to Governmental action with respect to foreign trade. Thus it is recommended that for a period of not less than a year the import and export of textiles between the British Empire and enemy States should be prohibited, and that afterwards imports from Austria and Hungary should be subjected to a special *régime*. Anti-dumping legislation, like that of the United States, and preferential treatment of imports from British Overseas Dominions are recommended. Protection is openly claimed for the iron and steel industries against dumping, to promote imperial preference, as permitting negotiation with foreign countries and in the interests of labour. Sir Hugh Bell, with Mr. John E. Davison, makes a vigorous protest against this demand.

Final Report of Lord Balfour of Burleigh's Committee on Commercial and Industrial Policy after the War. [Cd. 9035.] 9*d*.

The Position of British Trade and Industry in 1913; Measures to be adopted during the Transitional Period; the Supply of Materials; Essential Industries; the Treatment of Aliens in respect of Commercial and Industrial Occupations and Undertakings in this

Country; Industrial and Commercial Organisation; Finance and Industry; Fiscal Policy; Weights and Measures; Coinage Conclusions.

Ditto Interim Report on Certain Essential Industries. [Cd. 9032.] 2*d*.

Ditto Interim Report on Importation of Goods from the Present Enemy Countries after the War. [Cd. 9033.] 1*d*.

Ditto Interim Report on Treatment of Exports from the United Kingdom and British Overseas Possessions, and the Conservation of the Resources of the Empire during the Transitional Period after the War. [Cd. 9034.] 2*d*.

Report of the Agricultural Policy Sub-Committee of the Reconstruction Committee. [Cd. 9079.] 1*s*. 3*d*. *Summaries of Evidence with Index.* [Cd. 9080.] 1*s*. 3*d*.

Effects of the Agricultural Depression, Need for a New Agricultural Policy, Agricultural Wages, Price of Wheat and Oats, Effect of Guaranteed Prices on Rents, Method of Securing Increased Production, Sugar Beet, Agricultural Instruction and Research, Organisation and Co-operation, Small Holdings, Village Reconstruction, Reclamation and Drainage.

Final Report of the Dominions Royal Commission. With Map. Reprinted in small 8vo size, cloth bound. 1*s*. 6*d*.

Final Report of the Health of Munition Workers Committee. Industrial Health and Efficiency. Plates and Diagrams. [Cd. 9065.] 2*s*.

Preliminary and Historical Survey, Relation of Fatigue and Ill-Health to Industrial Efficiency, the Industrial Employment of Women, Hours of Labour, Food and Canteens, Special Industrial Diseases, Cleanliness, Ventilation, Heating and Lighting, Welfare Supervision.

Ditto Memorandum No. 21: The Causation of Industrial Accidents. Diagrams. [Cd. 9046.]

Infant Welfare in Germany. Report prepared in the Intelligence Department of the Local Government Board, 1918. 9*d*.

Report of Committee on Relations between Employers and Employed, Conciliation and Arbitration. [Cd. 9081.] 1*d*.

Memorandum by the Ministry of Reconstruction and Minister of Labour on Industrial Councils and Trade Boards. [Cd. 9085.] 1*d*.

Report of Enquiry made by the Ministry of Labour on the Origin, Constitution, Procedure, and Functions of Works Committees. 6*d*.

War Prices and House Rents. Department of Statistics, India. [No. 581.] The general level of wholesale prices in Calcutta at the end of December, 1917, was 68 per cent. higher than at the outbreak of the war. The corresponding rise in Bombay was 109 per cent.; in Karachi, 94 per cent. The rise in retail price was 21 per cent. in Calcutta, 29 per cent. in Bombay, and 35 per cent. in Karachi. The

rise in house rents in 1917 compared with July, 1914, was 41 per cent. in Karachi, 18 in Bombay, 9 in Calcutta.

Note on the Egyptian Budget. The annual Reports upon the affairs of Egypt, to which the British public looked forward with interest in the days of Lord Cromer and Lord Kitchener, have been discontinued since the outbreak of the war, and in his Note upon the Budget of 1918 the Acting Financial Adviser takes a wider flight than is usual in the Note. The intention is laudable but the execution is (perhaps necessarily) too sketchy to afford us much definite measure or indication of the progress of the country. On the other hand, the financial details are singularly imperfect. The debt is not mentioned. Nothing is said of the census taken last year, though its cost is of importance even for comparison. The telephones purchased last year are estimated to yield a revenue of £200,000 as against an expenditure of £140,000; but the terms of purchase are not alluded to. The currency situation is rather questionably defended but is not elucidated. The notes of the National Bank of Egypt, a private bank, which in 1913 oscillated between about 1½ and 2½ millions sterling, are now legal tender, inconvertible, and amount to about 31 millions. We are not told how much gold is held against the notes. The fixed amount before the war was 50 per cent., but is now probably about 6 millions against 31 millions of notes. In other words, the notes uncovered by gold have risen from 1 million to 25 millions. The terms upon which the notes are allowed by Government to be issued are not stated, but we are told that "the evidence is on the whole against any special inflation in Egypt due to our currency system." The evidence chiefly relied upon is apparently the fact that the rise of prices in Egypt is "probably less pronounced than elsewhere." This would be valid if gold and commodities were free to flow; but with an embargo upon so many imports and exports and the restrictions upon gold movements, the level of prices in Egypt is comparable rather to the level of water in a lock than to sea-level. And if there is inflation in the other countries with which comparison is made a parity of prices would rather prove than disprove inflation in Egypt. In 1916 the realised surplus was over 2¾ millions out of a revenue of about 20 millions. For 1917 a still higher surplus is expected when the accounts are closed. For 1918 the Budget is estimated to balance at £E.23,250,000. The Exchequer is evidently during the war in a flourishing condition, but some interesting problems of finance lie ahead.

Taxation of Capital

To the Editor of the ECONOMIC JOURNAL.

SIR,

It is impossible to read the three articles in your June number without dismay. That the discussions in the daily Press and the debates in the House of Commons should shew states of mind varying from mere currency-confusion to invincible ignorance is not surprising: we are prepared for anything from such quarters. That an American man of business should have published a great plan for wiping off the war debt and fertilizing post-war industry by at once issuing paper money to the entire amount of the debt on the security of a compact between the nations to reduce their armaments to the dimensions of a domestic police force whilst keeping up their military and naval taxation to the 1913 level for a hundred years to come is no worse than might have been expected from the odd mixture of cautious sense and reckless nonsense which the American business climate seems to produce. But when THE ECONOMIC JOURNAL shows unmistakable symptoms of the crazy delusion that the thousands of millions we have exploded into noxious, dissipated gases, destroying in the process an immense mass of wealth, both vital and material, are still extant to be taxed and levied and collected, merely because the figures which record their appropriation are to be found in the books of the Bank of England and cognate institutions, and are being used to register a legal claim by the contributors to a share in the income of the country (that is, to future harvests as yet unreaped, and future outputs as yet non-existent), fills me—sincerely as I respect Professor Pigou—with consternation and doubt as to whether our professed economists know any more of economics as distinct from stockbroking than our solicitors do of law as distinct from bar practice, our doctors of science as distinct from clinics, or our clergymen of theology as distinct from ritual.

Do they, like Mr. Sidney Arnold, who has the excuse of being only a Member of Parliament, regard as immediately available cash the £14,000 millions at which he estimates the capital of the nation? Both in the House of Commons and in your columns he has implied that he does. But when he comes down to practice, all he proposes is that the Government should effect a "levy on capital" by simply ceasing to pay interest on as much of the War Loan as it may resolve to confiscate, and to accept other stocks on mortgage. This is, of course, both feasible and constitutional; but it is confiscation of income, and does not enable the Government to anticipate a penny of future income. The weak point in Mr. Arnold's case is that he offers his capital levy plus a subsequent income-tax of 2*s*. 6*d*. in the pound as an alternative to an income-tax of 7*s*. 6*d*. or thereabouts. But he can give our capitalists no guarantee that, if they accept the levy, the present income-tax of 6*s*. will be reduced by a single farthing, or that it will not be increased. The candles of the capitalists will be burned for them at both ends with the greatest cheerfulness by a Labour Government, or a Government depending for office on the Labour vote.

Let us consider what would happen if the Government were to

treat every man who has given them five pounds which it has spent in gunpowder and burnt in Flanders or Mesopotamia, as if he really were, in your contributor's phrase, "worth £5." They could, if they decided to tax him on that assumption, take the American gentleman's advice to the extent of issuing paper money to the amount of the levy and putting it into immediate circulation. Suppose they decided on a 10 per cent. levy, and that this amounted to 1,000 millions (which is quite likely, much as I should prefer to expect 8,000). Let us assume that the spare money available as new capital for the year was 400 millions. This being the sole reality at the back of the paper issue, it would promptly depreciate until the whole bulk of it, despite its face value of 1,000 millions, would be worth only 400 millions.

This does not apply to burnt gunpowder alone: it is equally true of railways, mines, factories, and "fixed capital" generally. You cannot eat tunnels and embankments or pit shafts, nor pay debts with them: you can use them for the production of income and for that only. If the capital of the country were multiplied a millionfold we should still have to live from hand to mouth: any attempt on our part to "realize" would end in our realizing only that applied capital is not available for consumption.

To the man of business this seems absurd. What is the use, he asks, of telling me that I cannot realize my capital when I have done it again and again and see men doing it every day? He believes, because he sees people living by taking in washing, that we can all live by taking in one another's washing. Never having reached the limit of possible realisation, or seen it reached, he does not know that this limit is the newly accumulated spare money seeking investment at the moment. If it be four hundred millions, then capitalists desiring to realise (that is, to anticipate their next twenty years' income) can find investors who, wishing to postpone consumption of twenty years' spare subsistence, will swop with them to the extent of four hundred millions. But if the Government, by a levy of 10 per cent. on capital, forced capitalists to attempt to realise to the extent of 1,000, or 1,500, or 2,000 millions (according to the various estimates), it would not get a farthing more in hand than the four hundred millions; for the value of the stocks would go down to that sum no matter what its nominal figure might be. Even in such a trifling levy on capital as the death duties there is not a single instance known to me in which Somerset House has not had to allow the payment to be spread over a period of years. There is never anything to tax or levy on but spare income; and Jevons never displayed the peculiar sense of reality which distinguished him as an economist better than when he defined capital as spare money.

Capital is, in fact, spare subsistence; and when this spare subsistence is once consumed by workers in the act of making means of production, no further consumption is possible except of the product as it comes year by year or hour by hour. Even a building left without repair cannot be used by anyone for more than sixty minutes every hour; and any man attempting to "realize" it by living in it sixty hours a day would find himself very much in the position of one trying to live on the square root of minus a million. Professor Pigou's suggestion of taxing the capital represented by personal

ability is open to the same objection. Shakespear made a fortune by his ability; and since his death many other men have made fortunes by it. Some have lost them. Suppose Shakespear's genius, when he was a young poacher of twenty, had been valued at a million: a very reasonable figure! Professor Pigou might have helped Queen Elizabeth to assess a tax on it; but all the Queen's horses and all the Queen's men could not have collected it.

The practical conclusion is that the Government can stop paying interest to British subjects on the War Loan, and can also confiscate our industrial stocks and put the dividends in the national exchequer in future. If it will redistribute them satisfactorily I have no objection; for it has been as plain as the sun in heaven for fifty years past that the present distribution of income is absurd, and that redistribution of income is bound in all developed countries to take the place of such comparative trivialities as redistribution of parliamentary seats. But by no mortal means can the Government ever have more to distribute than the income of the moment. On the Stock Exchange to-day a few men can swop their claim to a quarter of wheat from the 1930 harvest for an immediate banquet at the Savoy; but the ultimate buyer will have to wait until 1930 for his wheat. As far as the available wealth is concerned, it matters not whether it be confiscated by a high income-tax or by a capital levy: the world cannot live beyond its income either way. Whichever method we adopt we must adopt it with our eyes wide open to this fact; for if we insanely imagine that we can "realize" next year's output this year (to say nothing of the output of twenty years hence), a crash must ensue which will discredit the whole scheme. But if we keep within possibilities by asking for no more at a time than the existing spare income, by spreading the payments over a number of years or otherwise, then we may not only force certain extravagant people to spend less, but incidentally nationalize industry by transferring the shares to the Government. Whether either of these operations be desirable is an open question. What is not an open question is that unless we know exactly what we are doing, the South Sea bubble will be the merest joke compared to an attempt to pay off the cost of the war by "taxation of capital."

Finally, may I say that it may seem incredible that considerations so obvious as those I have pointed out should have escaped economists, financiers, and men of business? I was incredulous myself for some time; but, having read the debate on Mr. Arnold's proposal, and most of the City articles dealing with the question, as well as the utterances of the economists, I am driven to the conclusion that even experts are subject to the illusion created by Stock Exchange operation that stocks on the whole are immediately realizable assets.

Yours truly,

G. Bernard Shaw.

The Editor has invited me to write something in reply to the foregoing letter. I can do this very briefly. Mr. Bernard Shaw has enunciated, with characteristic ornamentation, two propositions. The first is that resources which have been blown away in the operations of war are no longer available; the second, that most forms of capital, such as railways and mines, cannot be "realised," in the sense of being rendered susceptible to consumption. Both

these propositions (I do not include all the surrounding ornamentation) are true. Neither, so far as I can recollect, is denied in any of the three articles upon which Mr. Shaw purports to comment. In my own article they are both explicitly affirmed. Neither of them has the least relevance as an argument against a levy on capital carried out in the manner and for the purpose there proposed. I have not suggested that the State should collect and hand over for consumption either the relics of exploded shells or surviving railway embankments. The proposal is that, instead of intervening annually for an indefinite period to transfer actual income from taxpayers to holders of Government debt, it should interfere once only, to wipe off a substantial part of the debt, by transferring income-yielding instruments. I appreciate—and reciprocate—Mr. Bernard Shaw's kindly sentiment of respect. But I should have appreciated it still more had it led him to inform himself of what my article contained before he set out to criticise it. A. C. Pigou.

P.S.—Since the ornamentation about Shakespeare refers specially to me, perhaps I should not pass it by altogether. There are, as I indicated, serious difficulties in the way of a supplementary tax upon the immaterial capital of ability. But that urged by Mr. Shaw is not one of them. For, first, as I explained, this tax would not be levied in a lump sum, but annually. Secondly, the capital value of ability was defined as the discounted value of the income that it is expected to bring in to its owners. It is obvious that in this sense, the only one here relevant, the capital value of Shakespeare's genius at twenty cannot have been more than a few thousand pounds. To name in this connection such a figure as a million is a grotesque equivocation. It is like objecting to an *ad valorem* tax on the sale of copyright, that, since *Paradise Lost* is "worth" several hundred thousands, such a tax would have ruined Milton. A. C. P.

As I have had an opportunity of reading Professor Pigou's letter in proof, I am glad to have his support in my main and nationally vital contention. But if he will reread his article carefully, he will, I think, find in it what any very ordinary reader (say a Member of Parliament) would take to be an assumption that it is possible to pay off at once not only 10 per cent. of the cost of the war by taxing capital but even 25 or 50 per cent. No doubt Professor Pigou, not realizing the degree to which the error I have exposed prevails (it is rampant in the third article, and only restrained by a practical business sense of the difficulty of realization in the second) considered that he had sufficiently guarded himself from misunderstanding; but if he had succeeded in doing so I should have been eager to claim him as an authority on my side.

I confess I am not even yet convinced that he is quite free from the illusion that capital values really exist. What are we to make of his discussion of the case of Shakespear? He says that my suggestion that Shakespear's genius might have been capitalized at a million is "an equivocation." Apparently what he means is that the estimate is excessive, as "the capital value of Shakespear's genius at twenty cannot have been more than a few thousand pounds." Now I probably know a good deal more about theatrical profits than Professor Pigou; but if he will not accept my authority

I will accept his for the sake of argument, and estimate the capital value at £2,500. A 10 per cent. levy on that would have been £250. A 1 per cent. levy would have been £25. An attempt to collect either sum from the twenty-years-old Shakespear would have resulted in the discovery that the £2,500 was a figment. Would any sane Elizabethan at that time have advanced Shakespear a single shilling on the security of "the discounted value of his future income"?

No economist would "object to an *ad valorem* tax on the sale of copyright" on the ground that "since *Paradise Lost* is worth several hundred thousands [it is worth nothing commercially, by the way, as there is no copyright in it], such a tax would have ruined Milton." But every economist who understands his profession would object to a tax on the potentialities of penniless genius. A copyright, which can attach to an achieved work only, is a productive property. When I produce a manuscript, and the law gives me the power to withhold it from publication or performance on my own terms, I am in the position of the landlord of a freehold. I can live on the income of the freehold by cultivating it myself as a publisher or manager, or by leasing it to a publisher or manager. Or, if I desire to anticipate the income, I can sell it outright to some person who, having a fund of spare subsistence, desires to postpone consumption of it. What it will fetch will be determined by the current supply and demand in spare subsistence and by the attraction of a gamble in a very hazardous sort of property. But the sale once effected, the price can be taxed without taxing capital values, because the price has necessarily been paid out of spare income. The stuff that the money represents is there. When Shakespear was twenty, the money made by Sir Henry Irving when performing *Hamlet* was not there, and could not by any possibility have paid for the equipment of Drake's ships against the Armada. In short, you cannot tax copyrights. You can tax publishers' profits and theatrical profits and authors' fees; and you can levy on the price paid for copyrights when they are sold outright, because they all come out of income; but you cannot tax copyright as what Dr. Johnson called "the potentiality of becoming rich beyond the dreams of avarice." In making that distinction I am not writing "ornamentally," but exactly. Professor Pigou may mean that exactitude is the highest ornament of style; but if so, he has left this point, too, a little obscure. I really do not think I am guilty of obfuscating economic argument by the fascinations of *belles lettres*.

G. B. S.

Current Topics.

With the impartiality on matters of current controversy usual in The Economic Journal we now, after allowing the advocates of a Levy on Capital to have their say in our last number, invite our readers to hear the other side. The first two articles in the present number dealing with the subject are supplemented by the criticisms of Mr. Pethick Lawrence's proposal which Mr. Henry Higgs contributes to the *Reviews*, and by Mr. Bernard Shaw's observations printed above.

SOME of the arguments against the projected levy were expounded at the last meeting of the National Bank of New Zealand by the Chairman, Mr. Pember Reeves (reprinted in *The Times* of July 25th). Assuming the debt after the war to be £7,500 million and the taxable capital £1,200 million, he argued that in order to pay off half the debt there would be required an impost of over 30 per cent. (to pay off two-thirds 41 per cent.) collected quickly, say in three or four annual instalments. The selling value of all securities would be reduced thereby. " With a gloom of a 20 to 40 per cent. levy impending over them buyers would not be disposed to give the same prices as before." The reduction in the value of securities would involve a reduction in the accommodation given by banks. If the taxpayers are to be allowed to choose which part of their property they will contribute " the result would be to turn the Revenue Department into something like an Old Curiosity Shop and a lost property office." If the Government were content to become a mortgagee, until the mortgages were paid off the debt would remain. Masses of property awaiting realisation would further depress prices of capital. As to the suggestion that holders of War Loan should take the conscripted securities in exchange for their bonds, Mr. Reeves asks " On what terms? " and rules out the proposal as " muddled and impracticable." The resort to banks would diminish their liquid capital. Banks would have to remain mortgagees on a vast scale for years. Moreover, the community would not be freed from debt. The War Loan might be partly paid off, but the traders and industrialists would owe most of the money to the lending institutions. Also, working capital would be diminished. True, " the money merely passes from X to Y. Yes; but Y's £10,000 of War Loan, a first-class piece of property, is extinguished." " The working capital of the community is for the time £10,000 less." There would be great difficulty in assessing capital, *e.g.*, the funds of trade co-operative societies and insurance companies. What of " the creditors who have lent their money on the faith of most solemn and reiterated promises that both principal and interest would be secure " ? " It is no excuse for fleecing your creditors that you strip other people also." It is grossly inequitable that the owners of national capital should be picked out for exaction while professional men, writers, actors, etc., pay little or nothing. In fine, saving would be deterred by penalising the provident while allowing the spendthrift to escape. The only mode of lightening the burden of debt that Mr. Reeves can suggest is to " maintain credit, confidence, and enterprise "; and

so, as short-dated War Loans fall in, "to borrow the large sums required to pay them off, at reduced rates of interest."

The series of conferences of working-class associations held under the auspices of the Council of Ruskin College, as mentioned in former numbers of the Journal, was continued at Manchester in May last, when 150 delegates, representing some 90 trade unions, co-operative societies, and other working-class bodies, attended the fourth conference. The subject under discussion was *The State and Industry during the War and After*, and papers on *The State and the Citizen*, *The State and the Producer*, and *The State and the Consumer* were read by Mr. H. Sanderson Furniss, Principal of Ruskin College, Mr. Hilton, of the Garton Foundation, and Mr. J. J. Mallon, secretary of the National Anti-Sweating League. The papers, with a full report of the discussions to which they gave rise, have been published by Ruskin College in the form of a booklet, which is the fourth volume of the *Re-organisation of Industry* Series, price 1*s*., post free.

In addition to the work of these conferences Ruskin College, while still unable, owing to the war, to receive residential students as formerly, has been able to make an important new departure by holding at S. Edmund Hall, Oxford, during the months of July and August of this year, a summer school for trade union officials and others. This is, we believe, the first occasion on which a body of trade union officials have at their own request come up to Oxford for a course of study, not merely with the object of increasing their knowledge of the technical details of their trade union work, but for the study of economics, industrial law, and trade union problems—for education in a broad sense of the word.

The Committee of the British Association, Economic Section, whose reference is "The effects of the war on credit, currency, and finance," appointed last November a sub-committee to consider possible amendments in the income-tax. The sub-committee have circulated a *questionnaire* containing some leading questions. For instance: "Would you suggest any reductions or increases in exemptions, abatements, or allowances?" Another question suggests a doubt whether the distinction between "earned" and "unearned" income is sound; another question is, whether the "source" of a man's income is more important than the claims on it. We understand that the sub-committee has

been discussing the scales which might be recommended for a post-war income-tax, but that it has not yet come to a decision.

THE Government have decided to appoint a Committee "to investigate and report as to the relations which should be maintained between the wages of women and men, having regard to the interests of both, as well as to the value of their work. The recommendations should have in view the necessity of output during the war, and the progress and wellbeing of industry in the future." The Committee will consist of The Hon. Mr. Justice Atkin (Chairman), Dr. Janet Campbell, Sir Lynden Macassey, K.C., K.B.E., Sir W. W. Mackenzie, K.C., K.B.E., Mrs. Sidney Webb.

THE Newmarch Lectures at University College will be given this year by Mr. Henry Higgs—the third course which he has given in succession. The subject of this year's course will be *Financial Statistics*. The lectures are open to the public without fee or ticket. The first lecture—on *The National Balance-Sheet*—will be at 6.15 p.m. on Wednesday, November 6th.

CORRIGENDUM.

On p. 238 of the June number of THE ECONOMIC JOURNAL *for* "L.R.P." *read* "L.R.F."

RECENT PERIODICALS AND NEW BOOKS.

Journal of the Statistical Society.

MAY, 1918. *The Bases of Local Taxation in England.* E. J. HARPER. An exposition of the existing system presents defects for which reforms are proposed. The reader's views on incidence of taxation were disputed by Mr. Edward Bond. *The Industrial Position of Italy.* Prof. B. ATTOLICO and Dr. F. GIANNINI. *On the Future of Statistics.* HARALD WESTERGAARD. A methodological study referring to the paper read by the author before the American Statistical Association, and the criticism of that paper in the Journal of the Statistical Society for 1917.

Quarterly Review.

APRIL, 1918. *The Grievances and Aims of Labour.* A SKILLED ARTISAN. Lucid and apparently reasonable explanations are given as to the views of Labour on profiteering, the influence of Syndicalism, Socialism and Pacificism, shop stewards, and other burning topics.

The Edinburgh Review.

JULY, 1918. *National Expenditure.* J. A. R. MARRIOTT, M.P. *Problems of British Banking.* C. S. ADDIS.

The Nineteenth Century.

AUGUST, 1918. *The New Marxism.* EDWIN BEVAN.

The Contemporary Review.

JULY, 1918. *Capital after the War.* SIR HUGH BELL. *How to Prevent Banking Monopoly.* SIDNEY WEBB. "The only remedy, ultimately, . . . is for the community to take the monopoly into its own hands." Meanwhile transitional remedies are available.

AUGUST. *The Control of Prices.* A. C. PIGOU. Maximum prices rather than excess profits taxes are the proper corrective of profiteering as to articles necessary for the poor. Maximum prices involve rationing to avoid chaos in distribution. Their tendency to reduce production is not now very operative, production being already limited by deficient tonnage and other incidents of war. Various methods of regulating price—each regulation being the fruitful mother of many others—are illustrated by concrete examples.

Better Business (Dublin).

August, 1918. This number contains two descriptive articles on *The Irish Shirtmaking Industry*, and on *Co-operation in the New World* in dealing with nuts and berries; and three theoretical or speculative, *The Next Step in Co-operative Production*, *Co-operative Productive Societies in the Future*, and *Co-operative Production.*

Studies (Dublin).

June, 1918. This number of the Irish quarterly review of Letters, Philosophy, and Science includes a "Symposium" on *Four Years of Irish Geonomics* (1914–1918). Mr. George Russell ("A. E."), complaining that the officials of food control regulated the profits of the distributors on too generous a scale, recommends that every rural district in Ireland should become self-supporting—"eat its own bread milled in its own mills and baked in its own bakeries" co-operatively. "Life will be more interesting in the country-side," and productive power will be so much increased that there will be more food available for the townspeople and for export. Mr. Edward Lysaght testifies from personal experience that four years have converted agriculture from a very poor business into a moderately good one, notwithstanding the ineptitude of innumerable Government controllers. Mr. E. J. Riordan contends that there is a systematic boycott of Irish industrial resources by British Government Departments.

Bengal Economic Journal (Calcutta).

April, 1918. *The Appreciation of Silver.* J. C. Coyagee. *The After-war Price of Silver.* Gilbert Slater. *Our Currency Problems.* B. F. Madan. *Industrial Development of South India.* Gilbert Slater. *Co-operation.* B. A. Collins. *Industrial Development.* E. A. Horne. *The Labour Question in India.* H. S. Jevons.

Journal of the Indian Economic Society (Bombay).

March, 1918. To stimulate and focus the thoughts and energies of all interested in the economic advancement of the Indian people is described in an editorial as the object of this new journal. *The Indian Budget for 1918–9.* V. G. Kale. *The Village in the Melting-pot.* Gilbert Slater. Referring to Prof. Jevons' proposals (at the Poona Conference last December) for the application to India of the principle of the English Enclosure Acts, Prof. Slater points out that those Acts were not an unmixed benefit. *The Organisation of Research in India.* N. M. Murumdar. *Capital and the Rate of Interest after the War.* M. J. Antia.

The Quarterly Journal of Economics (Cambridge, Mass.).

May, 1918. *How to Promote Foreign Trade.* F. W. Taussig. After exposing several popular misconceptions concerning foreign trade and four dubious devices for promoting it (export bounties,

reduced rates for transportation of goods for export, reduced prices of such goods, discriminating duties in foreign countries), Prof. Taussig advises cultivating at home industrial efficiency and abroad "the spirit and the letter of the open door." *Recent Railroad Failures and Reorganisations.* STUART DAGGETT. *A Study on the Incidence of an Increment Value Land Tax.* CARL C. PLEHN. The effects of an increment tax of the British type are analysed, and illustrated by numerical examples, and compared with the general property tax in the United States. *Fixed Costs and Market Price.* SPURGEON BELL. *The Operation of the Massachusetts Income Tax.* CHARLES BULLOCK.

The American Economic Review (Cambridge, Mass.).

JUNE, 1918. *Inflation.* E. W. KEMMERER. "Inflation occurs when *at a given price level* a country's circulating media—cash and deposit currency—increase *relatively* to trade needs." Such an increase has occurred in the United States with bad results. *Credit Expansion under the Federal Reserve.* H. L. REED. *Price Maintenance.* A. R. TORDAL. *The Problem of Labour Turnover.* PAUL H. DOUGLAS. *Profits of Efficiency.* C. J. FOREMAN. *Is Utility the Most Suitable Term?* IRVING FISHER. "The two terms 'want' and 'wantability' might well be used alternatively." A "*unit* of '*wantability*'" might be called a "wantab."

Under the head, "Who is the Twentieth Century Mandeville?" Prof. Seligman replies vigorously to Prof. Patten's sarcasms with reference to public credit.

Political Science Quarterly (New York).

JUNE, 1918. *Bentham's Felicific Calculus.* WESLEY C. MITCHELL. A formidable attack on the utilitarian philosophy, supported by extracts from Bentham's manuscripts published by Halévy in his *Formation du Radicalisme Philosophique. Legal Theories of Profit.* C. J. FOREMAN. *The Food Supply of Russia.* H. C. SHERMAN.

Journal of Political Economy (Chicago).

APRIL, 1918. *The Chicago Milk Inquiry.* C. S. DUNCAN. A problem in price-fixing; not solved to the satisfaction of the writer. *Nassau W. Senior.* I. S. LEON LEVY. A description of Senior's career introduces a study evoked by the discovery of manuscripts containing unpublished lectures. *Political Economy and Social Progress.* C. H. COOLEY. *The Place of Value Theory in Economics.* W. H. HAMILTON.

MAY, 1918. *The War Labor Program.* L. C. MARSHALL. *The War Risk Insurance Act.* PAUL H. DOUGLAS. *Commercial Banking and Capital Formation.* H. G. MOULTON. *Nassau Senior.* II. S. L. LEVY. A foretaste of the lectures discovered (in manuscript) by the writer, showing that Senior was not, as commonly represented, a mere doctrinaire.

JUNE, 1918. *The War Industries Board: its Development, Organisation, and Functions.* C. N. HITCHCOCK. *The World's Coal*

Situation during the War. I. W. NOTZ. *The Requisites of a National Food Policy.* W. H. HAMILTON. Principles for the guidance of the consumer, the producer, and the Government are laid down.

Annals of American Academy (Philadelphia).

MAY, 1918. This number is devoted to *Social Work with Families.*

JULY, 1918. The subject of this number is *Mobilising America for the War*, which is treated under six heads, comprising in all thirty-two articles, for instance, on the mobilisation of women, eliminating vice from camp cities, stimulating labour efficiency in war times. Under the fourth head, *The Making of a War Budget*, Prof. IRVING FISHER teaches that "our real part in financing the war is good old-fashioned thrift or saving." Prof. S. PATTEN dilates on *The Fallacy of Price-bidding*—the rise of prices does not tend to increase production. The *mobilisation of the public mind* forms the last heading, comprising a plea for *Freedom in Discussion in War Time*, by NORMAN ANGELL.

The Military Historian and Economist (U.S.A.).

APRIL, 1918. *Are We in Danger of Becoming Prussianised?* T. N. CARVER. The difference between the *régime* of compulsion and that of voluntary agreement is greater than the difference between forms of liberalism (republic or constitutional monarch). Compulsion is necessary in war. Why not for an industrial army in peace? Its object is not so definite and unique as that of a real army—victory. Besides, war requires speed and secrecy. As to the prospects of liberalism with the voluntary system, all depends on the capacity of a people to stand prosperity. A system "in which the ideals of the peoples were perverted toward the economy of happiness, toward getting the largest number of pleasurable sensations out of life, would inevitably fail when it came in competition with a system in which productive activities and constructive achievement were themselves the great sources of direct and immediate satisfaction."

Among recent publications of the U.S. Bureau of Labor Statistics may be noticed *Food Situation in Central Europe*, 1917. April, 1918.

L'Egypte Contemporaine (Cairo).

JANUARY, 1918. *La contrabande douanière en Egypte.* J. ACHKAR-BONNET. The experience and suggestions of a Customs official, who argues in favour of substituting specific for *ad valorem* duties and for strengthening the penal law and procedure against smuggling. *L'organisation des industries en guerre en Angleterre.* M. S. AMOS. An inside account of the organisation and functions of our Ministry of Munitions.

FEBRUARY. *La distribution du crédit en Egypte et la menace d'une crise de spéculation.* DR. I. G. LEVI.

MARCH. *A propos de la menace d'une crise.* DR. I. G. LEVI.

APRIL. *Les économies de combustibles actuelles et futures.* F. DE LANCKER.

Journal des Economistes (Paris).

MAY, 1918. *Une protestation contre la bureaucratie britannique.* TESTIS SENIOR. *Lamartine orateur d'affaires.* PAUL MULLER.

JUNE, 1918. *Le renouvellement du privilège de la Banque de France.* YVES GUYOT. *Les finances du Royaume-Uni* (1917-8-9). W. M. J. WILLIAMS. A useful conspectus of recent English finance. *Troisième rapport sur les dépenses publiques en Angleterre.* A. RAFFALOVICH.

JULY, 1918. *Le coton et la siderurgie.* YVES GUYOT. *Aveuglement monétaire.* A. RAFFALOVICH. Directed against Mr. Larkworthy's monetary ideals. *Le Tabac depuis la guerre.* G. DELAMOTTE.

Jahrbücher für Nationalökonomie (Jena).

JUNE, 1918. *Vom Begriff der Wirtschaft zum Begriffsgebäude der Volkswirtschaftlehre.* O. SPANN. *Die Fürsorge der Staates für die Landwirtschaft.* G. BELOW.

Weltwirtschaftliches Archiv (*Jena*).

MAY, 1918. *Das Problem des vaterländischen Hilfsdienstes in kriegführenden und neutralen Ländern.* DR. OSCAR WINGEN. *Französische Schiffahrtspolitik während des Krieges mit besonderer Berücksichtigung der deutschen Interessen.* (Concluded.) DR. H. CURTH. *Die Donauprobleme und die deutschen Aussenhandelsaufgaben.* DR. W. H. EDWARDS. *Die Korkindustrie der Vereinigten Staaten von Amerika während des Krieges.* EUGEN BÖHLER.

La Riforma Sociale (Turin).

MAY–JUNE, 1918. *Le fonti storiche della legislazione economica di guerra.* G. PRATO. The difficulty of regulating prices, especially those of durable commodities, is illustrated with respect to house-rents by historical precedents. *Intorno alla pressione del prestito e dell' imposta.* G. BIRGATTA. The contention of Prof. Griziotti (in *Giornale degli Economisti* for May, 1917) that the financial burden of war may be shifted by a loan from the present to a future generation is criticised. *Prestite e imposte nelle finanze della Guerra.* B. GRIZIOTTI. Considering the *financial* effects of a loan involving recourse to the contributions of posterity and other incidents, the writer advises leaving to a period of greater prosperity the task of sustaining the greater part of the burden.

Giornale degli Economisti (Rome).

APRIL, 1918. *Teoria dell' ammortamento dell' imposte.* B. GRIZIOTTI. *I lavori della Commissione per l'ordinamento ferroviario.* L. AMOROSO.

MAY. *La clausola della nazione più favorita.* E. ANZILOTTI. *La guerra e l'aumento regionale delli prezzi.* A. CONTENTO. The rise of prices, large everywhere, has been largest in the North and in busy centres. *Sulla economia della concimazione.* E. MARENGHI. The theory of manure.

JUNE, 1918. *Come ripartire il carico delle spese della guerra.* B. GRIZIOTTI. Taxation combined with loans is recommended. As to the incidence of payment for loans, Prof. Pigou has considered only the *economic*, not the *financial* effects.

NEW BOOKS

English.

BARCLAY (SIR THOMAS). New Methods of Adjusting International Disputes and the Future. London: Constable. 6*s*. 6*d*.

BRADSHAW (FREDERICK). Social History of England. London: Clive. Pp. 404.

[The object of the volume is to supply within reasonable compass a text-book suitable for use in colleges and upper forms of schools. The author is Lecturer in Economic History at Armstrong College, Newcastle-upon-Tyne.]

CLARKE (JOHN). Outlines of Local Government. London: Pitman. 1918. Pp. 83.

[A revised and enlarged edition of the *brochure* noticed in the ECONOMIC JOURNAL, Vol. XXVI.]

CRAIG (W. L.). Sterling Decimal Coinage. A Colonial Plea for Modernising our Money. With some New Ideas in Respect to the Florin Scheme and the Crown Scheme. London: E. Wilson. 1918. Pp. 148.

HECHT (J. S.). Free Trade or Free Production. London: King. 1918. Pp. 20.

[In place of Free Trade with its low wages, low wealth increment, and long working hours, we may have high wages, high wealth increment, and shorter working hours.]

KELTIE (SIR JOHN SCOTT). The Statesman's Yearbook. Edited by Sir J. Scott Keltie. 55th Annual Publication. London: Macmillan. 1918. Pp. xlviii + 1488.

[The character of being up-to-date is maintained by the Yearbook. For instance, very recent particulars as to Russia are given. The table of principal events on the war is continued down to the end of May, 1918. There is an interesting map showing the world's pre-war food supply.]

LAWRENCE (F. W. PETHICK). A Levy on Capital. London: Allen and Unwin. 2*s*. 6*d*.

[Reviewed above.]

MALLOCK (W. H.). Capital, War and Wages. Three Questions in Outline. London: Blackie. 2*s*. 6*d*.

MANN (HAROLD H.). Life and Labour in a Deccan Village. (University of Bombay Economic Series, No. I.) London and Bombay: H. Milford. Oxford University Press. 1917. Pp. 184.

[A minute study of a village near Poonah typical of large tracts in the Deccan. The multiplication of landowners leading to an exodus from the village is a regrettable result of English rule.]

Meulen (Henry). Industrial Justice through Banking Reform. An outline of a policy of individualism. London: James. 1917. Pp. 324.

[It is contended that our currency and banking laws lead to serious industrial injustice. There are criticisms of many classical doctrines, Mill's views as to the Bank Act, Böhm-Bawerk's theory of interest, etc.]

Miller (T. Frame). Do You Pay Excess Profits Duty? London: Allen and Unwin. 1918. Pp. 34. 1*s*.

New Townsmen. New Towns after the War. An Argument for Garden Cities. London: Dent. 1918. Pp. 84. 1*s*.

Rowntree (Seebohm). The Human Needs of Labour. Nelson. 3*s*. 6*d*.

Ruskin College. The State and Industry During the War and After. Papers by H. Sanderson Furniss and Others. Oxford: Ruskin College. 1918. Pp. 84. 1*s*.

[To be reviewed.]

Scott (W. R.). Economic Problems of Peace After War. (The W. Stanley Jevons Lectures at University College, 1918.) Cambridge: University Press. 1918. Pp. 139. 6*s*.

Simpson (J. Y.). Some Notes on the State Monopoly of Sale and Subsequent Prohibition of Vodka in Russia. London: King. 1918. Pp. 64.

[The general effects and the financial aspects of the State monopoly, and of the prohibition are exhibited.]

Smith (A. D.). The Development of Rates of Postage. London: Allen and Unwin. 1918. Pp. 429. 16*s*.

Smith (E. J.). Race Regeneration. London: King. 1918. Pp. 223.

[A general idea of the topics treated may be obtained by the following heads of chapters: "The Declining Birth-rate," "Housing Endowment of Motherhood," "A Ministry of Health," "The Bradford Scheme (for Maternity and Child Welfare.")]

Spooner (H. J.). Wealth from Waste. With a Foreword by Lord Leverhulme. London: Routledge. 7*s*. 6*d*.

Turner (Samuel). From War to Work. London: Nisbet. Pp. 109.

["A new conception of the executive functions of government," and "a consciousness of the need of certain reforms" are inculcated. The author is joint-editor of "Eclipse or Empire."]

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GOVERNMENT CONTROL IN WAR AND PEACE.

THE vast expansion of Government control in the economic sphere which has taken place during the war is without parallel in the history of the world. Nobody doubts that in the difficult period of transition that must follow immediately upon the declaration of peace some portion at all events of this control must be retained. But on the question how far similar control is appropriate as a permanent peace policy there is acute controversy. One school, pointing to the appalling waste which has been brought home to the Ministry of Munitions and to the delays and incompetence of many Government Departments, demands that the whole thing should be swept away at the earliest possible moment. Another school, attributing the defects which have been revealed to the rush and hurry of war, and emphasising the success, for example, of the Ministry of Food, claims that the hold which has now been taken in the general interest upon private capitalism should be permanently retained. This controversy relates to three distinct types of control: first, administrative intervention by Government in industry, designed to increase production; secondly, Government interference with the allocation of supplies between different industries, different firms, and different individual consumers—interference the various forms of which it is convenient to group together under the general name of rationing; thirdly, Government regulation of prices. In the following pages these three different sorts of control will be studied separately.

I.

Administrative Intervention in Production.

During the course of the war the urgent national need for enlarged supplies of munitions, home-grown food, ships, and certain other articles, has led to direct State intervention in production. National productive establishments have been set up, private establishments have been controlled, and special grants made to enable them to expand their operations. The Board of Agri-

culture has taken powers to encourage, and, if need be, to compel, increased cultivation of land, and has also provided a number of facilities in the way of soldiers' and prisoners' labour and specially imported machinery to assist farmers. The underlying motive of this interference has been to force capital, enterprise and labour forthwith into the production of particular urgently needed things. It is true, of course, that, when there is a shortage of anything relatively to the demand for it, this fact by itself always tends to stimulate people to direct their efforts towards producing that thing rather than other things. But this reaction is usually a slow one; and in this war the essential requirement has been speed. The principal purpose of Governmental assistance and coercion has been to secure this; to surmount at once by direct attack obstacles that, in the ordinary course, could only be turned by a slow and gradual movement. And the need for such action has, of course, been intensified in industries where the Government itself, by artificially keeping down prices, has removed what would normally have been the main stimulus to private effort after increased production. After the war all this will be changed. It may, indeed, be decided that, in the interest of national safety, certain things (*e.g.*, wheat) ought to be produced in this country in larger quantities than the free play of private interest would secure; and, in that event, there will be a case for bounties or protective duties. But this does not imply any sort of industrial control. It is not administrative intervention. When normal peace conditions are restored, the main motive—an immense and speedy diversion of resources from their normal employment—which has lain behind administrative intervention during the war, will have entirely disappeared.

This, however, is not all. Besides impelling the nation's resources into particular services of very urgent demand, the Government has also intervened with a view to breaking down various rules and customs which have been built up by trade unions for the protection of the workpeople, and which are believed to hamper output. Agreements have been made with the unions, on a binding pledge that the old conditions shall be restored after the war, permitting women and unskilled workpeople to perform industrial operations hitherto reserved for skilled craftsmen, and waiving various other safeguards to which the workpeople have attached great importance. No doubt among the mass of rules and customs that have been scrapped some were definitely anti-social in their action; while others, though they might appear to hinder production at the moment, yet, by conserving the workers from overstrain, probably in the long run increased it. After the

war it may be expected that the unions, while standing by the rights given them under the pledges of the Government, will themselves undertake a review of these rules and customs in such matters as dilution and women's work. But, whatever settlement is come to in these matters, it is plain that Governmental intervention by way of persuasion and pressure upon the unions was a special *ad hoc* war measure, and that, when normal peace conditions are restored, it will not be practicable to continue it.

It might thus seem that, with the winding up of the war, there will be no reason why the Government should not return, so far as administrative intervention to stimulate production is concerned, to the general attitude which it was accustomed to adopt before. This conclusion, however, ignores one important consideration. It is true that the actual case for and against this type of Government action will not be substantially altered. But, owing to the experience which has been gained of what, in certain directions, Government is able to accomplish, it may be that people's knowledge of what that case is will have been modified. In this connection chief importance attaches to the management of railways. During the war these have, practically speaking, been worked as a single concern under Government control. Before the war the economies to be looked for from this kind of unification could only be guessed at. Now, in spite of the peculiar character of war traffic, with its immense trainloads of munitions and troops, there are available some guiding facts. Some authorities hold that these facts are distinctly favourable to a unified State railway system. It may be, indeed, that they are concentrating attention unduly upon immediate results and taking too little account of the deadening effects which such a system might in the long run produce upon railway enterprise and development. That, however, is clearly a matter for detailed study. In this field, therefore, the question whether a quasi-public administrative control should be continued after the return of normal peace conditions, or even whether this control should be further developed into definite nationalisation, may be regarded as an open one.

II.

Rationing.

Rationing in the wide sense in which the term is here used includes all forms of Government interference with the distribution of goods; whether it operates between different industries or between different firms in the same industry, or between different

consumers; and whether the procedure adopted is an embargo upon certain uses, or a system of priority certificates, or rationing in the narrow sense in which that term is ordinarily employed. The question of the place proper to rationing in the permanent peace practice of this country is intimately bound up with the question of price control. The solution will be quite different according as prices are or are not limited in such a way that, at the legalised price, the quantity of the thing demanded is greater than the quantity offered for sale. It is important to notice that not all price control involves this kind of limitation. A monopolist may be prevented from charging as much as he would charge if left to his own devices, and yet, at the price actually set up, no more of his product may be wanted than it pays him to sell. When there is no monopoly, however, if the Government forbids sellers to charge prices as high as the free play of the market would bring about, it necessarily follows that, at the price actually established, there is not enough of the commodity to go round among those people who want to buy it. The distinction, therefore, which is fundamental to the study of rationing, is not between control and absence of control over prices, but between a kind of control that causes demand at the controlled price to exceed supply and absence of this kind of control.

It is in theory perfectly possible to introduce a system of rationing under which prices are left entirely free. When this is done the limitation placed on the demands of those persons whom the rationing restricts necessarily at the moment reduces prices and leaves a larger amount of the rationed commodity available for other persons. Were it to be supposed, for example, that in the year immediately following the war freight charges were to be left free from control, a rigid rule cutting down to a minimum all imports other than those of essential articles of food would cause freight charges to be much lower than they would otherwise have been, and would, consequently, benefit those persons who spend a large proportion of their income on food, at a cost of inconvenience to those who would have liked to buy foreign luxuries. If, however, we are contemplating, not a temporary, but a permanent arrangement, it cannot be claimed with the same confidence that a rationing system which obstructs the purchases of one set of people will indirectly benefit the rest. For, if by this system the aggregate demand is kept down, the industry affected will not expand its scale of production so far as it would otherwise do. In those industries, however, which are subject to "the law of increasing returns," the very fact of ex-

pansion would in the end have made prices lower than they can now become. Obstruction to the purchases of one set of people will in these circumstances actually increase the price to others and lessen the supplies available for them. In industries subject to the law of diminishing returns, the situation is, indeed, otherwise. Here rationing which limits the consumption of some would, even as a permanent policy, benefit others. In theory, therefore, circumstances can be imagined in which a plausible case for it might be made out. The argument for it is, however, so intricate and the benefit looked for so indirect that no statesman would ever dream of introducing a permanent system of rationing on any large scale for its own sake. In practice, though a good deal *might* be said, it is certain that nothing *will* be said for it, except as an adjunct to the kind of price control described above, under which, at the regulated price, there is not enough of the commodity to go round.

Where prices are controlled in this sense, the ordinary market influences by which the distribution of any commodity between different industries and different people is regulated are in abeyance. Ordinarily at any price everybody buys for every purpose as much of a thing as at that price he wants, and this process exhausts the whole supply. But under the conditions here contemplated the sum of the demands of all purchasers for all purposes is greater, and may be much greater, than the supply. Distribution, therefore, if nothing is done, will be the sport of accident, influence, and ability to stand for a long time without fainting in a queue. There is no reason to expect that the distribution reached by these means will be in any sense a good distribution. Competent firms may be ruined and admirable housewives starved, while the friction, irritation, and discomfort engendered are likely to be enormous. In these circumstances rationing *must* be introduced as the only means of avoiding chaos. There *must* be rationing of materials among different forms of manufacture, so that the important forms shall not go short; rationing of that part of any material which is allocated to a particular form of manufacture among the several firms engaged in it, so that none of them shall be unfairly treated relatively to others; and rationing of the finished product among consumers, so that here again distribution may be "fair."

The technical difficulty of building up for permanent peace purposes a rationing system designed to bring about these results would, it need hardly be said, be extraordinarily great. The general nature of the problem presented by the rationing of

consumers would, indeed, not be very different from what it has been during the war. The Ministry of Food has demonstrated that for certain main staple articles of food this part of the problem is capable, in an atmosphere of general goodwill, of being solved much more satisfactorily than anyone would have dared to hope. But the other two parts of the problem, the rationing of materials to the various firms engaged in the same industry, and the rationing of them between different industries as a whole, would present much greater difficulties under normal peace conditions than they have done during war.

As regards the distribution of material among firms in the same industry, it has been natural during the war to take as a basis their comparative consumption of material in recent pre-war years. Thus the Cotton Control Board has made rules limiting the proportion of machinery that any firm may keep at work on American cotton—which practically means reducing the supplies of such cotton allowed to different firms in a common proportion—and the Paper Controller has obliged importers of paper to supply the manufacturers who buy from them in the same proportions as in 1916–17. It is obvious that, for a permanent peace policy, this device would not do An arrangement which tended to maintain the various firms engaged in an industry always in the same relative position as they occupied in an arbitrarily chosen year would be a serious obstacle to efficiency and progress. It is not easy to devise an alternative arrangement, or to imagine any plan by which this type of rationing could be permanently adopted without grave risk of freezing the industries affected by it into rigid immobility.

As regards the distribution of material among different industries, the peace problem would again be more difficult than the war problem. During the war Government action has aimed primarily at securing material for those industries and processes which it has regarded as of greatest national importance. With this end in view it has adopted two principal devices: (1) prohibition against the employment of certain things in particular specified uses; and (2) the allocation of materials to different industries or operations in accordance, not with the ordinary play of demand, but with its own opinion as to what is desirable. The former of these two types of control is evidently only an embryo form of the second. It may, therefore, for the purpose of this discussion, conveniently be subsumed under it. The policy of allocating supplies to uses of high national importance has been applied on a great scale to shipping, and, by means of an elaborate

system of priorities, to the main part of those industries which employ materials useful for war. The allocation has been based upon the Government's view of the comparative contribution which the various industries make to national war efficiency. This provides a definite standard to which to work. It is obvious that food and munitions and the support of the armed forces must take precedence over everything else; and, though, as the rivalry between the demands of munitions and of ships for steel has made plain, it is difficult, still it is not impossible, by conferences between representatives of the various Ministries, to work out a fairly satisfactory scheme of priorities. The reason for this is that everything is subordinated to a single relatively simple end. Under a *régime* of established peace—apart, of course, from possible "key" industries, for which the obvious method of assistance is bounties or a tariff, and not the allocation of material—there is no single end of this kind. We have no longer to deal with the Government's wants for war service, but with the wants of an immense and varied population for necessaries, comforts, and luxuries. In war time it is obviously more important to bring steel into the country than it is to bring paper, and to manufacture army baking ovens than private kitchen ranges. But in peace time none of these simple propositions can be laid down. Those things ought to be made which are most wanted and will yield the greatest sum of satisfaction. But the Government cannot possibly decide what these things are; and, even if it could decide what they are at one moment, before its decision had been put into effect conditions would very probably be changed and they would have become something entirely different. It is not easy to see how this obstacle to a permanent policy of rationing materials among the several industries of the country could be satisfactorily overcome.

Serious and perplexing as the technical problems described in the preceding paragraphs are, nevertheless, if prices are to be controlled in such a way that the demand at the regulated prices is in excess of the supply, they would need somehow to be faced; for the alternative, as shown above, is wild confusion. Since, therefore, we have already concluded that, if prices are not to be controlled in this sense, rationing will not in practice be called for, the choice between adopting and rejecting that policy depends upon whether or not it is decided to make this kind of price control a permanent part of our peace-time practice. That issue will be examined in the course of the following section.

III.

Price Control.

During the war the action which the Government has taken in regard to prices has been motived in the main by a desire to prevent "profiteering." This statement holds good of the whole body of price-fixing regulations as between producers and wholesalers, wholesalers and retailers, and retailers and the general public. There can be no doubt that these regulations have, during the war, served a very valuable purpose. Had it not been for them, those persons who happened to possess, or to be in a position to make, stocks of things that war conditions had rendered short, would have been able to charge very high prices and make enormous gains at the expense of the general public or of the State. The people affected by the regulations were not in general monopolists. Their opportunity to make large gains was not due to any restrictive action of their own, but to the sudden large demands or sudden shortage of supply which war conditions brought about. In these circumstances the establishment by the State of maximum prices, though it still allowed the firms affected to make larger profits than usual, nevertheless meant that at these prices the demand was in excess of the supply. Is price control of this character and with these consequences desirable as a permanent peace institution?

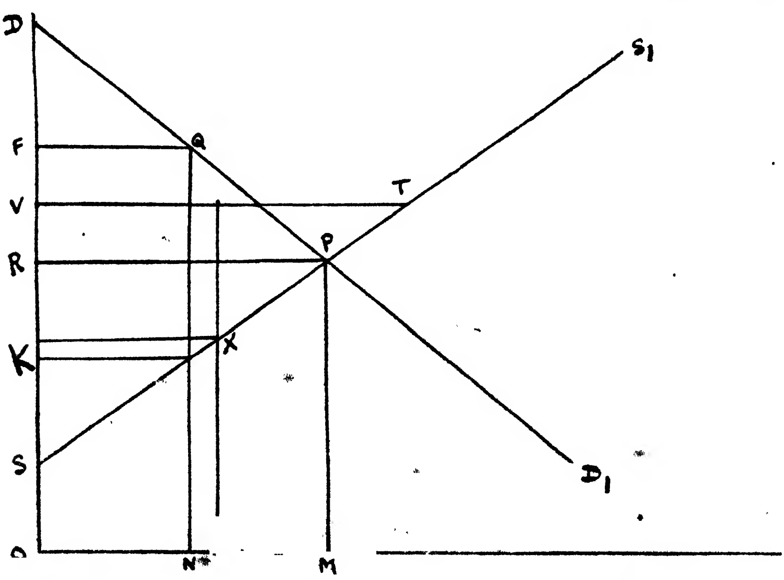
In any study of this question the vital point to bear in mind is that, under conditions of competitive trade, when abnormal profits are being made in any industry more capital and enterprise tends to flow into that industry, output is increased, prices fall, and the opportunity for special gain is thereby removed. No doubt, when there is, for example, a bad general harvest of some crop, anybody whose own private crop happens to be a good one will make a large gain. But, when there is a good general harvest and his private crop is a bad one, he will make a corresponding loss. On the average, and on the whole, when a commodity is being produced and sold under ordinary competitive conditions, prices will so regulate themselves that normal profits, and not more than normal profits, are obtained from them. Periods of good fortune and periods of bad fortune are both reckoned for in the calculations of people in search of an industry in which to invest their capital or brains. Any general permanent policy of anti-profiteering price regulation applied to ordinary competitive industries would act differentially against those industries whose profits fluctuate. It would deprive them of their pieces of good

fortune while giving them no help in bad fortune, and would, therefore, cause capital and enterprise to move away from them towards industries in which the profit was more nearly the same every year. This diversion of production from the channels into which economic forces tend to direct it, being, from the point of view of social utility wholly arbitrary—for there is no reason to suppose that industries of fluctuating demand and supply produce things which are socially less desirable relatively to their cost than others—would almost certainly involve a misdirection of effort and a real loss of satisfaction to the country as a whole. Even in the exceptional conditions set up by the war, this danger has not been altogether absent. The price of the greater part of our wheat purchases being determined by market conditions abroad, it has been recognised that a legal limitation of bread prices to 9*d*. per quartern loaf would, if introduced by simple regulation, have driven many bakers out of the baking business and so deprived the country of much-needed bread. To obviate this result, the Treasury has been compelled to couple the rule regulating prices with the grant of what is, in effect, a large annual subsidy. Of course, by this device it is always possible to keep the price of anything at as low a level as we may wish. Obviously, however, a policy of State subsidies upon the production of particular things as a normal part of peace practice must, if it is adopted, be based upon considerations other than those with which this article is concerned. Broadly speaking, then, we may conclude that permanent Government control over the price of things produced under competitive conditions is not required as a preventive of "profiteering," because, for competitive industries as a whole, good times and bad times and lucky men and unlucky men being taken together, competitive conditions are themselves an adequate preventive; while, from the standpoint of the public, such Government control is objectionable because it will hamper production. When we remember, further, that the adoption of this type of price control would almost necessarily, for the reasons set out in the preceding section, force us to undertake the enormously difficult task of peace-time rationing, the case against it is seen at once to be decisive.

This conclusion, as has been clearly indicated, refers only to price control over industries which are operated under conditions of competition, and in which, therefore, an artificial limitation of price causes the demand at the stipulated price to be in excess of the supply. In industries conducted under conditions of monopoly there is no natural tendency for prices to be brought down

to a level that yields normal profits. On the contrary, unless the State intervenes, a monopolist or a partial monopolist has the power, if he chooses, to fix prices at a level that gives him an abnormal profit at the cost of his customers. In these conditions prices, so long as they are not pushed down far enough to bring profit below the normal level, may be forcibly reduced without creating any gap between the quantity of commodity demanded and the quantity supplied. There will, therefore, be no need of rationing, and it can be shown that, in general, output will be, not diminished, but increased.[1] *Prima facie*, therefore, there is a

[1] It is postulated that the artificial price established by the State is greater than the competitive price, but less than the monopoly price. Let the curves of demand and supply be straight lines. If they are not straight lines it can be shown algebraically to be *probable* that the output will be increased. But, if they are straight lines, there is a simple proof that this is *certain*. (1) First, consider conditions of diminishing returns. Construct a diagram such that *PM* represents the competitive price and *OM* the competitive output; while *QN* represents the monopoly price, and *ON* the monopoly output. Let the State-controlled price measured by *OV* be greater than the competitive price, but less than the monopoly price. It is easily shown that the monopoly output



ON is one-half of the competitive output *OM*, and that the output which it will pay the monopolist to produce when the price is fixed at *OV* will be measured by one-half of the line *VT*, drawn horizontally through *V* to cut SS^1 in *T*. But, since *OV* is greater than *PM*, it is obvious that *VT* is greater than *OM*. Consequently, one-half of *VT*, which is the output at the controlled price, is greater than one-half of *OM*, which is the monopoly output (2) Secondly, in conditions of increasing or constant returns it will obviously pay the monopolist to produce at the artificial price the full amount demanded at that price, since, *ex hypothesi*, the artificial price is lower than the monopoly price, this amount will necessarily be larger than the monopoly output.

strong case for State action to regulate the charges which may be made for monopolised and partially monopolised articles. This has long been recognised in regard to the services supplied by railways and gas companies. Should the movement towards combination, which the experience of the war and the benevolent attitude of the State has done much to stimulate, extend monopoly more widely over industry, the field open for intervention will be extended correspondingly. Moreover, the technical difficulties, which, before the war, made Governments unwilling to tackle the problem of price regulation outside public utility industries, have been shown by war experience to be *somewhat* less intractable, and *somewhat* more amenable to treatment by the help of conversion cost calculations than had formerly been supposed. There is, indeed, still great danger that unskilfully exercised control, by fixing prices too low, may check enterprise and lessen output, and that the price maxima may not be adjusted quickly enough to meet changing conditions. It must be remarked, too, that conversion cost accounting can give no help in fixing prices until we have somehow decided the prior question what rate of return any particular concern may reasonably be allowed to earn upon its capital, and how large that capital in fact is. These considerations must be carefully weighed before any practical policy is framed. Nevertheless, the general conclusion is warranted that, while in competitive industries the policy of price control ought not in any circumstances to be continued when normal peace conditions are re-established, in monopolistic industries the case for that policy, already fairly strong, has been strengthened to some small extent by the experience of the war.

A. C. PIGOU

THE PUBLIC CONTROL OF THE LOCATION OF TOWNS.

ECONOMISTS and statesmen alike have usually regarded the situation, character, and size of urban settlements as matters outside the scope of governmental regulation. An analysis of the localisation of industry has, of course, always found place in economic theory. But it has been almost wholly of a descriptive character, and its political uses have hitherto been slight. So complete, indeed, has been the dissociation between the economic and political considerations in this field that economists have tended to neglect the secondary effects upon urban distribution of certain classes of governmental action. It is astonishing to find, for example, in the voluminous controversies upon national and local finance, how little attention has been paid to the influence of alternative modes of taxation upon the growth of towns—all the more astonishing because during the whole period of these controversies the sanitary and civic problems of large towns have given endless anxiety. The consequent incompleteness of the economic analysis does not matter much. Nevertheless, the omission is regrettable, because if economists had attached any theoretical importance to the effect of public measures upon different classes of industrial settlements, the question would spontaneously have arisen as to what type of town should be given the preference. And if that question had been seriously propounded and argued out, say, fifty years ago, it seems likely that one or more constructive formulas of the ideal town—economically and socially—would have emerged and gained some authority. The town-planning movement might have had an earlier genesis and a sounder scientific foundation. In particular, the conception of a prescribed limit to the size of towns would almost certainly have been formulated, though there would have been plenty of room for disagreement over its quantitative interpretation.

Things, however, fell out otherwise. No such scientific formulas were discussed by economists. Schemes for ideal towns occurred sporadically, but they were always non-expert, and generally Utopian or perfectionist; the ideas associated with them never

flowed into the main stream of economic thought, and with one exception they came to nothing in practice. The evils of the great and growing cities could not be ignored, but constructive criticism focused itself upon details of interior organisation. Political intervention followed in the same course. Public health and traffic necessities led to a multitude of regulations governing sanitation, street widths, air-space, crowding, and such specific items of town structure. Cities were, in Europe at least, restricted in their expansion vertically. Lately the density of building in suburban extensions has been limited, and some elements of street design imposed, by the process known as town planning. In the old centres of many cities there have been slum clearances and street widenings. And there has been a gradual imposition of standards of house accommodation, together with a tendency in all countries for the work of housing the poorer sections of the community to pass into the hands of the municipalities.

It cannot be said that these activities have been successful in making modern towns healthy, agreeable, or efficient. But they connote a growing public consciousness of the facts of the case, and they therefore facilitate the opening of the larger question as to whether the great size of urban settlements is not in itself an evil capable of social treatment. Moreover, there are signs that more comprehensive action will be forced upon us by the development of other State activities and changes in industrial requirements. Some of the most powerful social forces—notably the Public Health, Labour, and Manufacturing interests—exhibit from very different points of view a grave discontent with our cities as they are. Hitherto it has been hoped that sanitary and housing reforms would make healthy places of all our towns, however large; but Dr. Brend's recent analysis of the vital statistics appears to destroy the accepted view.[1] The working-class demand for good housing is being extended to cover good surroundings for life and work as a whole; the Labour Conference of January, 1918, unanimously resolved that the bulk of future building ought to be diverted into new towns of limited size and in permanent contact with country life. The interest of the agricultural community in such a proposed diffusion of urban advantages is obvious. Manufacturers, again, anticipating highly competitive conditions after the war, are dissatisfied with the alternatives offered them, on the one hand by crowded, unhealthy, and expensive city sites, and on the other hand by country or suburban situations where the economic benefits of association are not fully available; and

[1] *Health and the State* (Constable, 1917).

their discontent may well crystallise into a demand for scientific urban organisation as an essential of industrial efficiency.

If the *primâ-facie* case for some urban redistribution is admitted the issue arises as to whether public intervention is necessary, or whether the change can be entrusted to that interplay of economic factors which has achieved the present distribution. Let us leave aside for the moment the criticism that the matter is too complex for public control, or that the economic control has hitherto made a ghastly mess of its job. The question is whether the interplay of economic forces can bring about a change corresponding to the new economic needs. And the answer appears to be in the negative, because in this case inertia, or friction, is so powerful as to prevent the machinery of readjustment from getting under way at all. Take, for instance, the requirements of manufacturing concerns, which constitute the dominating force in the interplay. The cheapening and acceleration of transport have made it much less important than formerly for businesses to be located right inside their principal markets or close up to their sources of materials; in fact, in many cases the widening both of buying and selling markets has made them free to choose among innumerable alternative situations. On the other hand, the developments of scientific organisation increase the importance of specially built factories with opportunities for expansion according to a prearranged plan; and still more recent developments in the theory of "welfare" stress the economic advantages of light and airy buildings in healthy situations. These considerations tend to drive manufacture out of the great towns. But an elastic supply of labour and the presence of power, light, and drainage services for the factory, and of houses and the social attributes of urban life for the workers, are usually necessary; and these needs make the open country situation impracticable. Something intermediate is plainly indicated. Is it open to the *entrepreneur* to obtain exactly what he requires? In some cases it is. A firm working on a very large scale and commanding adequate capital can acquire a virgin site and create its own urban environment. This happens occasionally in Great Britain, and often in the United States, where corporations like the Steel Trust are in the habit of taking large areas of land right in the country, or more usually a short distance from a small town where there is some reserve of labour, and setting up thereon not only their works but complete villages, with houses, shops, institutes, and places of amusement for their employees.

Now obviously any such village is the germ of a new town, and

it may be thought that here we have the natural economic reaction against over-centralisation, and that all industry will rearrange itself in this manner in good time. But in practice the method is open only to a minute number of businesses. The average manufacturing concern must have an outside supply of water, light, and power; it has no capital to spare for constructing houses, roads, and drains; and it cannot employ whole families, but depends upon association with other businesses which are complementary to it in this respect. Hence when it is forced out of town centres by cramped buildings and high rents, it solves the problem by settling on the outskirts, where public services and labour reserves are still available. Unhappily, in many such new industrial districts businesses are quickly overtaken by the evils from which they have tried to escape. What is happening is not that the great cities are automatically dispersing themselves, but that they are now growing by a process of cellular sub-division. Industrial nuclei are pushed out along the railways and canals, and swell towards each other and the mother town; and by the time the new district has merged into the general whole, most of the special economic advantages of the situation have been forfeited. The central part of the town is also adversely affected by an increase of traffic congestion and of the remoteness of healthy rural suburbs, involving a general loss of leisure and diminution of productive power.

Theoretically the best situation for industry is a relatively small town with a good technical equipment and a varied population, and above all with industrial areas planned in relation to means of transportation. Not many such places are to be found. They cannot arise spontaneously, because to give them a reasonable start requires concerted action on a large scale. Under medieval conditions a handful of mechanics, feeling the pinch of town taxation or guild tyranny, could migrate to a free-trade village like Birmingham with prospects of success, and others following suit, a new centre could easily arise. Under modern conditions a piecemeal migration is not possible. The very interdependence which makes modern industry so productive operates to prevent its transfer to places where productivity might be still greater. Business co-operation is wonderfully complex, but it has no integral consciousness; and the negotiations and bargains necessary to a concerted migration would be far too elaborate to be conceivable. But occasional attempts in this direction show that the idea is present in the minds of enterprising manufacturers.

For reasons similar to these Mill placed the establishment of

new colonies within the province of government. If it comes to be accepted that there is a case in theoretical economics for manufacturing centres of definite type and size, clearly the argument for the entry of the State as organiser of new towns would be strong. Nor would the argument, or the intervention, stop at the initiation of fresh settlements. Ultimately, it would seem certain, the whole scheme of urban distribution would have to be made the subject of a unitary social design.

The question of social control of the size and character of towns is raised, from another side, by the prevailing trend of ameliorative legislation. In particular, enactments prescribing expenditure at the charge of the national exchequer, and enactments setting up new standards of residential and industrial conditions, necessarily have an effect upon urban distribution, and this effect may go as far as to dislocate altogether the present economic governance of the system.

Hitherto the influence of the State in this field has been small, since any tendency, intentional or not, to favour one locality or type of local unit at the expense of others has met strenuous political resistance, and a rough balance of economic equity has thus been preserved. Any bias that has crept in has been obscure and accidental, but it has probably already gone in favour of the large towns as against the small towns, though its incidence as between town and country as a whole is more doubtful. What we have to consider is whether this bias is likely to increase to an important extent. Let us take, to begin with, the system of Grants in Aid from national funds towards the expenditure of local governing bodies. These fall roughly under four heads: Education, Poor Relief, Police, and Public Health. Our Education Grants, so far as they are based on school attendances, and not upon the actual local cost of the work done (which varies with the economic character of each district), exhibit no bias. But one or two minor grants are, in effect, differential subsidies favouring large towns. For example, the School Building Grants, from 1833 onwards, went to assist localities in which the cost of building was relatively high.

Obviously, grants of this kind help a large town to overcome financial difficulties which would otherwise tend to check its growth; and, generally speaking, such crude subsidies have been avoided, or quickly discontinued under criticism. But subsidies have re-entered in more subtle guise. An Epidemic Grant, which allowed compensation for lost school attendances due to certain diseases, would have been equitable enough if local characteristics,

geographical or structural, had no relation to the incidence of the diseases. It was abolished in 1903, presumably because there was a fear that it might discourage the sanitary efforts of local authorities. And now we have Grants for Special Schools for Defective Children, for School Clinics, and for Medical Attention. Are these also to be abolished when the economists discover that they operate as subsidies to those towns which, by reason of their size and type of organisation, produce more than the average amount per head of sickness and physical defects? For unquestionably that is their effect. The cost of doctoring its excess of sickness, and, indeed, of maintaining, educating, and burying the abnormal proportion of its children who fail to attain the productive age, is as much part of the peculiar expense of the great city as the cost of the frequent repairs of its crowded pavements. When, by State action in the general interest, the former costs are charged upon community resources, either they will check the growth of large towns by becoming a burden upon municipal finances, or they will actually facilitate the further growth of these disease-producing towns at the expense of the nation as a whole.

The cost of Poor Relief comes almost wholly out of local rates, the only important Grants in Aid being for Pauper Lunatics and the education of children under the care of the Guardians. On the supposition that the slums of large cities produce more than their due share of insanity and poverty, both of which are often the consequence of ill-health, these grants show the same bias as those for defective children. So also does the Police Grant, which is distributed in proportion to local expenditure on police services; for the large cities notoriously produce, per head of the population, more crime and disorder, and require more traffic regulation, than small towns or country districts. As, however, the Police Grant is mixed inextricably with the other grants of the Local Taxation Account, which are allotted on a basis determined thirty years ago, when the country was less urbanised than now, its net bias is rather obscure. Its real significance for the present argument is that it is made the model, by Mr. Sidney Webb[1] and others, for proposed wide extensions of the Grant-in-Aid system. Even Mr. Cannan,[2] who objects to grants proportionate to expenditure, on the ground that they subsidise mismanagement and weaken the checks on the uneconomic location of population, advocates grants to areas where the quantity of a given service

1 *Grants in Aid: A Criticism and a Proposal.* (1911.)
History of Local Rates in England. (2nd Edition, 1912.)

required by the State from local authorities happens to be high in proportion to rateable value. This is about the minimum proposal which could conceivably have the desired effect of stimulating such activities as a local Health Service; yet, obviously, inasmuch as the size, situation, and character of towns are factors in determining the quantity, as well as the cost, of some of the services to be performed, it is open to precisely the objections that Mr. Cannan brings against the bolder schemes of Mr. Webb.

This is easily seen in the case of the proposed grants for Public Health purposes. Large towns will naturally absorb a much larger sum per head than rural districts and country towns; and if the cost of slum clearances and street improvements is in any way charged upon the national exchequer, the subvention to great cities may become enormous. The only possible basis on which such grants can be given is the actual expenditure on the service which the State desires to encourage. The practical choice is thus between no grants at all and grants which, in effect, by destroying some of the checks on urban expansion, may actually foster the increase of the population in the areas that produce the greatest proportion of the evils at which the Grant-in-Aid system is aimed.

The real position is, of course, that social legislation of the type under consideration necessarily brings new factors into the economic reaction. This is true whatever administrative method is adopted. If the State, in the case of Public Health, were to follow its own precedents of the Factory Acts and Wages Board Acts, it would simply prescribe a national minimum standard of health for towns, throwing the onus of maintaining that standard upon municipal organisation and the local rates; and, this being duly enforced, the subsequent economic readjustments would smash the great towns to pieces. But for obvious reasons such an enactment could not be enforced, even if anyone believed the method desirable. The Public Health problem cannot be grappled with at all unless central resources are applied to it, and as the structure of towns has a bearing upon Public Health, the corollary is that with the appearance of these central resources upon the scene the State at once acquires a manifest financial interest in urban distribution.

Grants in Aid are but a piece of machinery. The argument applies to all legislation of the type which diffuses, among large sections of the population, free or subsidised services at the charge of national taxation. State Insurance shows the same principles at work under another form, and here the subvention to large towns is unmistakable. The quantity of sickness per head among

insured persons in large towns is known to be double that in rural areas, and much greater than in country towns. This means that State taxes and the contributions of rural workers are used to pay for the disposal of a by-product of urban organisation. The Sanatorium Fund, raised from general taxation, is devoted to the treatment of what is essentially a town disease. And if a Ministry of Public Health is created, its functions will be open to precisely the same comment—which can, indeed, be extended to cover the work of several other State Departments. The cost of government, per citizen governed, is, in fact, considerably higher in the great cities than elsewhere. Hence with the extension of the province of government, the direct national interest in the system of urban distribution naturally becomes more evident.

Perhaps the decisive case will be that of the housing of the working classes. After the war an abnormal shortage of houses will coincide with an abnormal economic difficulty in providing them. To meet this situation special State action is necessary; and the Government is contemplating the issue to local authorities not only of loans to a large amount, but also of free grants of part of the capital cost of new houses. On what economic principle can such grants be fixed? Since all local authorities are being urged to undertake schemes to house their excess population, it would seem to be assumed that the subsidy is to be fixed at a percentage which will permit the building of houses wherever there is insufficient houseroom for all present residents or would-be residents, and the letting of such houses at rents which these persons are willing and able to pay. No other principle is conceivable if the idea of meeting all local wants is seriously held. In practice, of course, no principle whatever will be followed—the grant will be restricted to an amount which seems to the Local Government Board, in its wisdom, "reasonable." In other words, a percentage will be selected that suits a determining number of important municipalities, and promotes enough house-building for the time being to satisfy the public.[1] Anyone can see that, as things are, the new subsidies will tend to encourage the growth of towns which had, in the pre-existing balance of forces, reached or closely approached their economic limit of expansion; indeed, unless events take a fresh turn, all limits to expansion would henceforth appear to be removed. Other factors that have been mentioned

1 Since these words were written it has been announced that the grant will be 75 per cent. of the realised local loss. This is, of course, a preferential subsidy to building in the least economic situations. The bias in that direction is greater than it would have been if an unvarying percentage of the cost of building had been offered, as the argument assumes.

seriously modify the system of urban distribution. This one revolutionises it, and deprives it of all practical utility.

Legislation now looming up in the middle distance promises to be still more destructive of the system. Comprehensive Minimum Wage enactments will affect urban distribution very greatly, but the direction of influence will depend upon the method of fixing the minima. Unless these are based upon the local cost of a series of standard personal requirements, they will permit those places where the cost of living is dear to flourish by evading the intention of the law. On the contrary, a serious endeavour to base the minimum on the cost of commodities and services leads logically to the institution of a Minimum Standard of Social Environment—or, at any rate, of a Minimum Wage sufficient to pay for that Standard in each locality—the influence of which upon urban distribution would be prodigious. If, for example, the Minimum Wage were required to cover, not merely the cost of given quantities of food and clothing, but also the rent of a house of a specified cubic content on a plot of one-twelfth of an acre in a district of standard town-planning amenity, plus the cost of access thereto from the place of work—and plainly only the enforcement of a standard of that kind would put one place on an equality with another in the interpretation of the Minimum—the money wages in great cities would become so much higher than elsewhere as to compel an almost universal exodus of business into rural districts.

So also with a Minimum Standard of Leisure. The simple eight-hour day enactment, or trade-union rule, is virtually evaded by urban systems which impose long journeys to and from the work-place. Just as the Minimum Wage needs to be graduated according to cost of living, so any maximum of working hours ought to be graduated to compensate for journey time. Otherwise some businesses will continue to compete with others by absorbing more of the leisure and vitality of the workers. On the other hand, the enactment of a Standard Day based on the number of hours between the workman's departure from home in the morning and his return thither at night, and therefore varying from town to town in accordance with the average daily time spent in industrial journeys, would have some exciting effects.

If graduated minima of this scientific kind are at present impracticable, the reason is that the system of urban distribution fails to stand the test of the entry into the economic province of such basic material interests of the employed classes as leisure and a healthy environment. The analysis seems thus to reveal

not only that the system is becoming indefensible, but that its scientific validity could have been challenged long ago on the ground that it has not safeguarded satisfactions and interests of the greatest importance. In view of this result, efforts to preserve the system by adapting it to the new conditions, with the object of maintaining economic equity as between town and country, and between small and large towns, are fantastic. As between country and town, indeed, economic equity is a delusive ideal; political considerations have always influenced the State in its adjustment of financial matters between them; and now that the need of a certain quantum of rural industry is held to override purely commercial considerations, the conception of economic equity is less relevant than ever. As between town and town, the strict impartiality of the State, in legislation of the type now current, would, as has been shown, hopelessly dislocate the industrial system; while the passing of such legislation in a primitive and obvious form is leading to the disadvantageous growth of the larger towns, and actually reinforcing tendencies which foment the social evils attacked.

We thus seem to be driven to lift the subject of urban distribution right out of the sphere of the interplay of self-regarding actions into the province of social design and control.

For the purposes of social design, the economic analysis, so far as it has gone, will be of considerable value; but it needs now to be made more quantitative in character and to be extended to all factors which concern the material welfare of the people. And it must cover not merely urban distribution in the narrow sense, but the location and organisation of rural industries and settlements also. Moreover, economic analysis alone is not enough. It should be coupled with a political and civic analysis, for the structure of towns and villages has close relations with their political and cultural life. The object of the whole inquiry should be the elucidation of guiding principles for the future; the indication of what, taking every factor into account, would be the most satisfactory types of towns and rural settlements.

A town formula already proposed, for which wide usefulness is claimed, though it has never been placed upon a strict scientific basis, is the set of principles associated with the Garden City movement. This contains the ideas of the limitation of size, population, and density, of close contact between urban and rural industry, and of municipal ownership and control of land and public services as a means of enforcing design and securing permanence. The formula provides well for health, amenity, leisure, and manu-

facturing efficiency, and for a rural organisation much superior to the scattered village system; but a more detailed quantitative analysis is needed to ascertain what is the minimum population which will give a reasonable amount of localised interdependence of industry. Obviously elements of taste and judgment will enter into the determination of an exact formula for the ideal town. The balance of considerations will also be much affected by local conditions, as, for example, the prevalent scale upon which industry is conducted. Thus you could not run many first-class shipyards in a town with the Letchworth population limit of 35,000, though the new method of "fabricating" ships, if it is continued after the war, will permit of a considerable decentralisation of this industry. But the idea of fixing a definite limit seems a primary necessity of social design, and for this reason the Garden City formula is an excellent basis for further discussion and analysis.

It is very important that the practical bearing of the arguments here brought forward should be immediately realised. Limitation of large towns implies, and can perhaps best be brought about by, the provision of new towns for the surplus population; and if ever there were an opportunity for the initiation of such a departure in policy, it is now. Vast numbers of new houses have to be placed somewhere. Thousands of factories and workshops have to be built to meet the new conditions of industry. Where are all these to go? The State finds itself forced to answer this question, since its influence, by the accident of events, is decisive. It is vital that sound principles should be agreed upon before such enormous quantities of energy and material flow irrevocably into the wrong channels. If, for example, we continue, with the aid of State loans and grants, to build extensive new garden suburbs to cities like London, Birmingham, and Manchester, we shall almost certainly increase the difficulties of adopting a good social design later on. It is fallacious to assume, as some town-planning reformers do, that we can go on indefinitely adding garden suburbs to great towns, returning at our leisure to open up the central areas. To dilute the heart of a city with gardens, open spaces, and wide roads is to revolutionise its whole economic basis. To present only one aspect of this—men may find it worth while to travel two hours per day for the sake of operating their businesses in a centre which is highly organised and concentrated, but they may not be willing to travel three hours per day to and from a centre where the degree of concentration is much less. If we seriously intend to reduce the density of our cities, which is the

only way to make them thoroughly healthy, we ought to have some idea of the suburb-carrying capacity of the proposed type of city-centre, before proceeding to add further suburbs. And if the provision of a rural zone to every large industrial group is found, as in the Garden City formula, to be an important element of the ideal town structure, we ought to make provision for such zones in our development adjacent to great cities—building satellite towns, with a considerable measure of industrial self-dependence, rather than suburbs. And this would mean quite a different manner of planning, and the selection of situations some distance further from the centre. Proper examination of the whole problem would show what is possible and what is not; what is in the line of an ordered design, and what would prove in the long run an obstruction thereto. At present we are not proceeding in absolute darkness. There is enough light to make it evident in which direction we ought to be travelling, though the precise point of destination is still in doubt. It is also very evident that we are not travelling in that direction and that unless prompt attention is paid to the helm we shall find that our progress does little but add to our difficulties.

EDWARD ORMISTON

THE FUTURE OF LONDON AS THE WORLD'S MONEY MARKET.

THE probability of peace being definitely arranged within a measurable distance of time naturally arouses consideration as to how international money market operations will be resumed when that desirable object is attained. From the City point of view, one of the most important matters that will have to be faced is whether when conditions become normal the old predominance of London in the money markets of the world will be restored to its full power. During the course of the war there have been many factors which interfered with the ordinary course of international financial transactions. The remittance of money from one point to another has been either forbidden or restricted, and a great deal of business that was hitherto done by means of the drawing of sterling bills on London has been conducted upon a cash basis. The employment of gold to correct foreign exchanges has sunk to a minimum, and owing to the demands of the war the London market has experienced the novel condition of finding all the neutral exchanges very adverse. Such conditions leave room for a considerable drift in international business, and in some quarters it is suggested that the long-dated supremacy of London as the monetary centre of the world might be endangered.

On this point I do not think there need be much immediate anxiety if those in control will meet the situation in a statesmanlike manner, and with a due regard to the new conditions that have been produced by the course of events during the war. If only these considerations are kept well in view there seems to me no likelihood that any other financial centre can supersede London at this stage. New York, when the United States has more fully developed her internal resources, and service in the foreign field offers greater reward to her young men than service at home, may perhaps take financial precedence of London, but that is not just yet. It is beyond question that Great Britain and the United States can co-operate in many financial ways at home and abroad to the advantage of both. The estrangements of old times are at an end, and this war has brought the English-speaking nations together again, so that they know and respect

each other to an extent that seemed impossible a few years ago. That is one of the big gains to both nations arising out of this great tragedy:

Berlin as the money market of the world is unthinkable. So far as banking capacity and experience are concerned, it may be admitted that Germany is qualified to organise and run an international money market. A majority of the names of the prominent merchant bankers of London indicate their origin, and associate their forefathers with the policy of peaceful penetration, but until the moral code of Germany changes, and permanent proof is given that her conversion is sincere, we can dismiss the possibility of any country voluntarily placing its resources within her banking control. This does not say, however, that London will regain its old pre-eminent position without a certain amount of effort. All the monetary centres will start after peace is established under exceptional and very uncertain conditions. Those controlling their operations will have to act boldly, and yet with complete assurance that the policy they pursue will, in a measure, bring back business to something like normality. And it is precisely on the means to be adopted that division of opinion is likely to be experienced. For instance, in certain quarters in London some are found in favour of further extending the protection so long enjoyed by the home accepting interests in the London money market for their paper as against that of the foreign banks with offices in London. The views entertained in this respect found expression in the following paragraph, which appeared in the *Times* on July 5th last :—

FOREIGN BANKS IN LONDON.

"We understand that, as a result, no doubt, of the experience gained through the war of the results of the establishment in London of the branches of enemy banks, the whole question of the conditions under which any foreign banks whatever ought to be permitted to establish themselves in this country has been under the consideration of the Committee of Clearing Bankers. Also that they recently drew up a report of their conclusions, involving various restrictions on the operations of foreign banks here, and that this report has been put before Lord Cunliffe's Committee on Currency and Exchange, which is regarded as the proper body to make recommendations on such a subject to the Government. There had been for some time before the outbreak of war a good deal of criticism in British banking circles about the facilities given in this country for competition by foreign institutions, and it may well be understood that the case for restricting it has been vastly strengthened in view of after-war prospects."

According to this commentator the Committee of the London Clearing Banks in their considered report desire in future not only

to restrict the operations of *all* foreign banks in the world's money market in London, but also had under review whether any agency banks whatever ought to be permitted to establish themselves in this country. Yet, with one or two exceptions, the agency banks more particularly alluded to are those of our Allies in the war. When such views are expressed one wonders whether the Clearing Banks' Committee realises that the money market of the world, if it is to be continued in London after the war, must be something more than a mere local banking organisation.

Fortunately such opinions are not generally held by those well able to judge the conditions that go to form a great international monetary centre, as is evident from the report of a recent important committee. This committee was appointed by the Board of Trade to inquire as to what amendments might be advisable in the Companies Acts 1908–17, having regard to the constructive policy after the war.

The following gentlemen were members of the committee :—The Rt. Hon. Lord Wrenbury; Mr. Arthur S. Comyns-Carr; Sir Frank Crisp, Bart.; Mr. George Welsh Currie; Mr. Frank Gore-Browne, K.C.; Mr. James Martin; the Hon. Algernon H. Mills; Mr. Richard David Muir; Mr. Christopher T. Needham, M.P.; Mr. Henry A. Payne, C.B.; Sir Owen Phillipps, K.C.M.G., M.P.; Sir William Plender, G.B.E.; Mr. Owen C. Quekett; Mr. Andrew Wilson Tait. The power of this committee to speak with authority in regard to conditions in London is unquestioned, and it is significant that the opening paragraphs of their report were framed as follows :—

"The question which lay in the forefront of our investigations and to which we attributed prime importance was that of the employment of foreign capital in British industries.

"The preliminary question whether it is desirable that foreign capital should be freely attracted to this country is one upon which there is little, if any, difference of opinion. The maintenance of London as the financial centre of the world is of the first importance for the well-being of the Empire; anything which would impede or restrict the free flow of capital to the United Kingdom would in itself be prejudicial to Imperial interests, and any legislation which would tend to impede or restrict the free flow of capital here by imposing restrictions, or creating impediments, ought to be jealously watched, lest in the endeavour to prevent what has come to be called 'peaceful penetration,' the normal cause of commercial development should be arrested.

"It is to be borne in mind that at the conclusion of the war—if it should be concluded upon such terms as we hope and anticipate—there is no probability that the countries which are now the enemies of the Allies will be those which will be in possession of capital looking for external employment. Outside the countries of the Allies, it may be said, speaking generally,

and subject to exceptions of no great moment, that Europe will have little surplus capital to invest. The foreign capital which we have to contemplate will be capital flowing not from the Central Empires of Europe, but from other parts of the world, of which America may be the chief. To impose restrictions upon the influx of capital aimed at our present enemies, with the result of deterring the flow of capital from (say) America, would be a policy highly injurious to the economic recovery and renewed prosperity of this country after the war. For these reasons we are of opinion that in all amendments of the law falling within the scope of our reference the expediency of the attractions of foreign capital should be steadily borne in mind, and anything which would have a restrictive or a deterrent effect should, as far as possible, be avoided."

There is thus a distinct cleavage of opinion as to the methods that should be adopted when business is conducted after the war, and a close consideration of the position, with an open mind as to improved methods of working, is, in my opinion, a matter of high importance at the present moment.

If London is to resume its supremacy as the financial centre of the world, there should be no restrictions on the legitimate operations of foreign banks which are entitled to their proper share in the world's money market. You cannot have the world's money market located in London unless the foreign banks are allowed to have their rightful status in such a market. The money market of the world is essentially a cosmopolitan thing. It was one of the few concrete instances of realised Free Trade before the war, except in one respect, to which I shall refer later on.

Great Britain's import and export trade will always ensure a big bill discounting business in Lombard Street. It is, however, essential to the retention of the world's money market in London that *inter-foreign* trade transactions should continue to be financed by the Sterling Bill. Inter-foreign trade covers goods moving from one country to another, in which operation the United Kingdom is neither importer nor exporter. As illustrations—the shipment of silk from the Far East to New York, or coffee from South America to New York, or to any other country than the United Kingdom, is foreign commerce that has nothing whatever to do with British trade. Quite half the total amount of sterling bills that come to London represents the financing of inter-foreign trade. London's supremacy in the exchange markets of the world is therefore based on something more than British foreign trade, other nations, in fact, being contributors to British financial prestige in making London the world's money centre. Are these facts recognised and reciprocated in London as they ought to be? It is because I do not consider they have been, that

I suggest that the time is now opportune for the removal of an unfair restriction on agency banks, in a market which is built up by international co-operation. It is of the utmost importance to London's future position that this inter-foreign trade financing should be preserved and encouraged after the war. The foreign banks have opened in London because they feel they are entitled to their place there as members of the world's financial clearing house, and to enjoy in this city the full privileges of membership. If they did not possess their own London offices they would be obliged to employ agents, who, like all agents, have to be paid for their services. These agents, the banks or the merchant accepting houses, naturally would prefer to reserve the privileges of this financial clearing house for themselves alone, just as the London clearing bankers have successfully kept out the provincial banks from the London Clearing House. It is simply a matter of vested interests. But such a narrow and selfish spirit in regard to the world's money market cannot be maintained if London is to continue its financial supremacy. So long as every foreign country was dependent on London's financial assistance, I take it these countries had, so to speak, to put their pride in their pockets and amiably accept the situation. But when conditions have changed abroad something requires to be done to induce certain transactions to come to London as before. If not, London may wake up to find, too late, that it has pursued a mistaken policy.

Sir Charles Addis, in his recent article in the *Edinburgh Review*, on "The Problems of British Banking," when discussing the subject of agency banks in London, points out that their acceptances are discriminated against in the market through the discount rates quoted for such paper, as against the British bill. The world's money market, if it is to be permanently located anywhere, must be a free and fair market. The seeds of disintegration are within it, if any of its members obtain advantages not accorded to all.

Here in London, in the world's money market of all places, where such a thing is antagonistic in principle to such a market, and in the home of Free Trade, too, we find Protection has been in existence for the benefit of home accepting interests for many years.

Sir Charles recognises very fairly, I submit, that the supremacy of London would be weakened by the removal of agency banks' funds to any other money centre, and emphasises the obvious fact that the world's money market must of necessity mean the

direct representation in that market of banks of all nationalities. Wherever that market is located a fundamental principle of such a market should be that no member should obtain preferential advantages, except those based on intrinsic merit.

I do not mean that every foreign agency acceptance should command the finest discount rate current in the London market. But, if any foreign agency acceptance is as inherently good as any other London acceptance, it should not be discriminated against solely on the ground of its being a foreign agency, and should be entitled to the most favourable discount rate of its class. In one or two cases, I am well aware, this is the case to-day, and I suggest that it would be a graceful act if it were officially announced that the old-time stigma which has attached to this class of paper had been removed.

The political effect of this action, I believe, would be considerable, especially in banking circles in Germany, and, after all, it would perhaps be the best method open to us to ensure the continuance of the supremacy of the sterling bill in the exchange markets of the world. If discrimination is to be made against any class of bills in London, either against their availability for discount at the Bank of England, or in regard to market rate differentiation, I suggest that the bills so treated should be those which Sir Edward Holden some years ago described as "Spurious Finance Bills" drawn on any bank in London, whether clearing or otherwise.

If London is to be the money market of the world in future, in my judgment it is essential to recognise that foreign banks have a right to be there, and to be given equality of opportunity for the exercise of their legitimate banking functions in that money market.

When a foreign bank opens an office of its own in London it results in its former London correspondent losing some advantages. The foreign bank's balances are then lent through its own London office in the London market, and the prestige and profit from this action inure to the foreign bank instead of to the former vicarious owner. Again, considerable commissions for agency and acceptance work are lost to the London correspondent, and the management of that bank would scarcely be human if it said it liked to see its valuable accounts diminish in this way. The merchant accepting houses also do not favour foreign banks opening London offices because their former foreign clients naturally prefer opening their sterling credits through their own banks with London offices. The foreign agency bank acceptances afford

increased security to the English buyer of these acceptances, for, if the credit risk of the opener of such credits was good enough for the merchant accepting houses to take for their own account, the financial strength of most of the London agency banks is superior to many, if not all, of these accepting houses.

It used to be a common remark and objection to the discounting of London agency acceptances that the assets to cover these were not in London. The merchant accepting houses, when they accept on foreign account, must send the relative shipping documents abroad, just as the agency banks do; otherwise it would be impossible to receive the relative covering remittances at maturity. The holder of a bill accepted by a merchant banker on foreign account—and nearly all the acceptances of merchant bankers are on foreign account—who imagines because this bill is discountable at the Bank of England he holds something of superior intrinsic security than if he held an agency bank bill, does not understand the nature of inter-foreign trade paper. Few agency banks accept to the full extent of their capital and reserves, whereas the majority of these merchant bankers habitually accept to many times the extent of their capital—in some cases beyond five times their capital. The objection raised by some London bill buyers to agency paper is comprised in the formula, "Their assets are not in this country." This is not correct in the case of all agency banks, for some of them have more cash assets in London than the liability on their own outstanding acceptances. These same London bill buyers are apparently unaware that, if they applied the same "formula test" to the acceptances they buy of London merchant bankers, they would find the relative assets against these acceptances were also not in this country, and, keeping in mind the excessive extent to which I have said some of these merchant bankers accept, a holder of their acceptances is therefore incurring greater credit risks than if he bought agency bank paper which some of these bill buyers pride themselves on avoiding. It would be interesting to know to what extent these London accepting houses usually carry cash in the money market, or hold liquid reserves against their outstanding acceptances, as compared with the cash and liquid reserves carried by the agency banks in London against their outstanding acceptances in his market. If the facts are ever fully known as to what was the situation in London in August, 1914, in regard to their relative liquidity—I do not think the agency banks need fear such a disclosure. Another important item to consider is this—that a foreign bank with an agency in London is much more likely to be acquainted with the status of

its home clients opening credits through its London office, than any accepting house located in London, doing foreign business, can be, and the trade of the agency bank's own nationals with the British Empire certainly tends to increase by direct representation of such a bank in London, in a way that would be impossible if it had to be cared for by agents in London with their necessary limitations. The opposition to agency banks in London is quite intelligible—it mainly arises from the merchant banking houses who have become powerful in the past through their acting as accepting brokers for inter-foreign trade in the world's money market. The evolutional development of international banking, and the branch system, gradually do away with the services of intermediaries, and make for greater financial all-round strength, efficiency, and responsibility.

Another factor to be reckoned with after the war is whether the foreign and overseas exchange banks will be prepared to buy sterling bills, drawn on merchant banking firms in London, with the same freedom as they did in pre-war times. What the position of these firms is going to be when the war is over is, in some cases, a matter of conjecture, and the difficulty is not made less by the fact that they do not publish balance sheets.

It must be remembered, too, that it is not the discount market nor, in most cases, the British deposit banks which give most credit to such acceptances. It is the foreign and overseas banks which, by their exchange purchases, assume the main liability on this class of paper. When these bills are accepted and the shipping documents are detached and given up, the exchange banks have generally only the drawers and the acceptors on whom to rely. In the majority of cases it is the acceptors upon whom they mainly depend, and these merchant bankers' bills are all strengthened by the endorsements of the foreign and overseas banks before they make their appearance in the London discount market and pass into other hands.

The standing of the merchant accepting houses is therefore a matter of vital concern to the foreign and overseas banks. Suppose the clearing banks are prepared, and have the capacity to undertake a large part of the inter-foreign trade accepting business that was previously done by the merchant accepting houses, and they succeed in imposing new restrictions on the legitimate credit operations of foreign agency banks in London. Is this attitude towards other nations which used the sterling bill to finance their commerce in the past likely to conduce to London's retention of the world's money market? I think not, and the

richer countries, which are those to whom this credit should be most freely accorded, could probably avoid using the sterling credit by replacing it with another of a different currency. My suggestion is that, instead of placing restrictions on the free use of the sterling bill, drawn on the agency banks for their inter-foreign commerce, now is the right moment to do everything possible to still attract that class of financial business to London.

Before the war it was a cause of complaint in the London money market that too much credit was given to too few names. With bank amalgamations this concentration will be accentuated, and, if this agitation for restrictions on the operations of foreign agency banks is successful, one naturally inquires on whom are the London sterling bills to be drawn when peace comes?

In this time of general overhaul and reconsideration one is confronted with the question, "How is it that, although the great private banking firms have disappeared and been superseded by the big joint stock banks, these merchant banking houses who lend their credits for a consideration should have escaped the demand for periodical published statements of their condition?" The position and operations of the big private merchant firms who do business only on their own account are within the knowledge of their commercial associates and bankers. When these merchant firms, however, develop to the stage that their credit has become so high that they can lend their name to others, and thereby become bankers as well as merchants, it appears to me that the borderland of privacy has been passed, and that it is incumbent upon them in the public interest to publish their balance sheets. The time is long passed when clean credit on bills of exchange running into millions can be accorded without detailed information as to the financial foundations upon which it can be justified. Banks and discount houses disclose all this freely. Why should the merchant accepting houses take refuge in secrecy? If one of these accepting houses should happen to find itself in difficulties, everyone will wonder why no demands had ever been made for the publication of the balance sheets of these houses. Then, of course, public opinion would force them all to come into line with modern requirements and conditions.

Let us look at the position of most of the great joint stock deposit banks in London before the war. First, what was the general capacity of their boards? Many of the directors were men who had no special knowledge of industry or commerce; some were obviously ornamental; some had served the Government at home and abroad; relatively few were in daily touch with the industrial life of our country, or were alert or shrewd enough to

be a real help to the managers of their bank when questions arose as to the wisdom of making advances in particular industries. Many of these directors had retained their seats because of their association with merged country banks. Their mental outlook, in fact, may be described as that of country gentlemen; shooting and hunting are all very well in their place, but precise information on these subjects is not the sort of knowledge that permits right decisions to be reached on banking policy.

A banking directorate entirely composed of banking experts would probably be unsatisfactory. Their point of view and experience would not be comprehensive enough. At present, where you have a strong man as managing director, or general manager, he sometimes dominates the board with his technical ideas, which may be sound enough, so far as the liquidity of the bank and the interests of shareholders are concerned, but which sometimes fail to take into consideration the ultimate prosperity of the nation, which is dependent on something much more important than successful money lending. Banking is trusteeship. A proper granting of credit should make possible for many the right to a livelihood at home in decent comfort, as the diversion of credit in international directions may deprive our own people of the opportunity of getting work at home, and force them to cross the seas to countries other than their own. I am not suggesting that the ideal bank board should be composed entirely of captains of industry, who might deem it to be the duty of their bank to accede to every claim for financial assistance that in their judgment they considered sound. I am not so sure that, if these captains of industry had supported such proposals—and by these captains of industry I mean men who are doing things daily, and have not reached the stage of being ex-captains of industry and therefore out of touch with things as they are—the general prosperity of the community would not have been greater than it has been, under the domination of those whose actions are mainly based on what they regard as their supreme duty to their shareholders, without troubling overmuch about their duty to the general public, who provide their capital in the larger sense. Some such idea is evidently at work in the minds of one of the largest deposit banks, as Barclay's chairman the other day told his shareholders that his bank proposed to have in future advisory directors, with special knowledge of particular industries. This is a step in the right direction, and, if all banks will reconstitute their boards on the basis of each director possessing certain essential qualifications, the general managers of these banks will have at their disposal that wider knowledge which is so important for their well-being.

One of the difficulties resulting from centralising the control of banks in London is that the most capable men engaged in industrial concerns in the United Kingdom are at work so far away from London that they are not easily accessible for consultation. It might be possible to overcome this drawback if the general managers of each bank were increased in number, and the younger managers were free to go and consult with these advisory directors in the provinces, instead of asking them to come to London to board meetings for that purpose. These younger general managers could devote a large part of their time to studying industrial and commercial conditions in the territories covered by their bank's operations. The knowledge and experience these younger general managers would thus acquire would prove to be a valuable asset eventually to their banks, and would tend to develop a much more informed type of general manager than now exists in some of the deposit banks in London. A few of the largest American banks and trust companies are adopting this plan of giving their ablest young men opportunity, responsibility, and status, when they are worthy of it. I therefore suggest that it would be sound policy on the part of the deposit banks in this country to considerably reduce their present directorates, by getting rid of those members of their boards whose services are of little or no real value, and to rely on their advisory directors, whose assistance is much more worth having. All the senior general managers, I contend, should have seats on the board, and these, with, say, five or more advisory directors with special up-to-date knowledge of industry, and, say, five or more directors whose general fitness is unquestioned, would constitute a strong directorate, and produce well-balanced banking policy.

Another reform that might well be considered is in regard to deposits. One of the excuses frequently offered by the deposit banks for buying so many bills on the London market was the necessity of off-setting their liability on demand deposits. These bills, commercial and financial, they said, were beyond doubt good, the return on them secured their shareholders' dividend, and their early maturity protected the position of their depositors. Whether such an investment was in the interests of the nation was not the main consideration. Were not these bankers, it might be asked, by buying all the good bankers' paper that was offered them thus helping to increase the prestige of London as the money market of the world? Yes, they were doing that, but making London the money market of the world is surely not the sole concern of British banking. This demand liability on deposits

might be lessened, I imagine, if the deposit banks offered higher interest rates for fixed deposits for one, two, or three years. The nightmare of deposits repayable on demand would be relieved *pro tanto*, and the banker would be in a more protected position to discharge his duty to industry and the national interest. Overseas banks take fixed deposits. Why should the Joint Stock banks advertise to take only deposits at seven days' notice? If the deposit banks would offer their present depositors—that is, after the war—say ½ per cent. more than the rate allowed on seven days' deposits for fixed deposits for one year, ¾ more for two years, and 1 per cent. more for three years fluctuating, I have little doubt a large amount of their present deposits would be immediately converted into fixed deposits. These fixed deposit receipts should be non-negotiable, as I do not consider it would be desirable to have them made marketable. Recently a suggestion has appeared in the Press that debenture stocks should be created by banks. The objection to this, I think, is that it creates a preference on bank assets which is undesirable in the interests of ordinary depositors. One always feels as an ordinary depositor with a discount house, that one's relation as a creditor is less secure than with a bank which does not hand out its assets as cover.

It does not seem to be possible that the full and free use of the London money market, as it was before the war, can be restored unless the victory of the Allies is complete and final. Prussianism must be destroyed entirely, and the German people must show by their deeds that they have turned their backs for ever on those who brought about their degradation in the eyes of all civilised people. Only then will it be prudent to waive the restrictive regulations that are now in force to prevent our present enemies from benefiting by sterling credits on London which may be granted by banks and accepting houses there. These credits may take the form of bills or advances, and nothing is easier for those who would be parties to such a thing than to turn these credits over to the use of those to whom they would be directly denied here. That is one of the difficulties of being the world's money market. It is a source of embarrassment in time of war, and it remains the same in times of peace unless there is concord and sincerity among all the nations of the world. The League of Nations is only a fiction if all the great nations are not included therein, and the world's money market does not answer its own description unless the motives of all its participants are free from suspicion and confidence is complete.

ROBERT CALLANDER WYSE

DEFLATION AND PRICES AFTER THE WAR.

INFLATION during the war is now accepted as a fact; and though, as Professor Pigou has shown, no precise definition of the word is wholly satisfactory, yet the popular conception of it as "an increase in the general level of prices brought about by financial means" is sufficiently definite for practical purposes. What has been the root cause of this inflation? Taking the world as a whole it is evident that war expenditure can only be provided for by (1) increased production, or (2) abstinence from consumption or accumulation.[1] In other words, "if war eats your cake you cannot have it yourself." But for reasons of their own Governments prefer to camouflage this fact. There are two ways in which this is done. The first is by the issue of paper money whereby the money counters in the possession of private people change their real value. The second is by the creation of additional bank credits enabling persons to subscribe to war loans without reducing the amount of money they spend or accumulate. Both methods produce a rise in prices which enforces the abstinence which the Governments have not imposed directly.

But inflation is not the sole cause of a change in general price level. Suppose that all Governments and peoples had been financial purists and that war expenditure had all been met directly out of income (whether paid in the form of taxes or loans), there would have been no inflation. Offhand one is tempted to argue that there would also have been no change of general price level because private purses would have been emptied in the aggregate to the exact amount that the State's purses had been filled. This reasoning would hold good if all the forces operating were purely economic and if at the same time the aggregate demand of States and peoples remained unchanged in character. But neither of these assumptions is true. War produces psychological effects: it provides a stimulus to exertion: it calls for restrictions and rationings on the part of the State. Again, it profoundly alters

[1] Deterioration of capital is, of course, negative accumulation, and therefore war costs paid for out of money that would otherwise have gone to keep capital in repair are included in the formula in the text.

the nature of the aggregate demand for commodities and services: it causes dislocation of industry: it alters the requisite weighting of index numbers. The effects of these causes will not all operate in the same direction, but the enumeration of them is enough to show that the changes in general price level during the war must not be wholly attributed to inflation.

Another important point to realise is that, in determining general price level, only commodity prices are taken into account. Prices of fixed capital already in existence, and prices of securities, do not enter. During the war very remarkable differences have been exhibited in the prices of fixed capital. Some capital not in great demand, or which has been restricted or controlled by the Government, has fallen in price, while other capital which is much needed and difficult to replace has soared to fabulous heights. Thus a great deal of house property has fallen (*e.g.*, in the City of London by 20 or 30 per cent.), while some has enhanced. Again, what has happened to the railways in this country should be compared with what has happened to the ships. Both are public utilities, both have been in great demand during the war, both have been controlled by our Government, but the control has been of a different kind. In consequence ordinary railway shares have actually fallen in price, while shipping shares have mounted many fold. The change which the war has brought about in the prices of securities bearing a fixed rate of interest is uniformly downward. This is not surprising, for these prices merely express the amount of money required to produce a fixed income. As the current rate of interest for new investments rises in consequence of the great State loans, this amount naturally falls.

With the cessation of hostilities the world will[1] enter on a transition period which will probably be continued for several years before equilibrium is again reached. The essential characters of this period will be: (1) Continuation of extraordinary State expenditure; (2) Demobilisation of men and capital from war work and their general absorption into peace work; (3) Recoil from the restrictions and abstinences of war.

(1) Thoughtless people are apt to assume that within a few weeks of the cessation of hostilities the expenditure on war will almost disappear. So far from this being the case, it is likely that it will remain nearly at its full war level for several months, and even then only gradually decline. It follows that the various States which have borrowed most of the money required to pay for the war during its progress will continue to borrow for

[1] This article was written before the armistice.

many months (some, perhaps, for years) after hostilities come to an end.

(2) In 1914 the transition from peace to war produced a dislocation which caused grave unemployment both of labour and of existing (fixed) capital, and cut down the total volume of production. Gradually, as the war machines grew, they ate up all the fluid labour and capital and reduced unemployment to a record minimum, at the same time swelling the total output (including war output) above the pre-war amount. When peace comes the demobilisation of labour and capital will produce a similar dislocation and reduction of total output. Some war capital and some labour will become permanently derelict, some will take time to adjust itself to the new conditions, some will be immediately available. A striking example of the last class is the merchant marine which will set about carrying civil merchandise directly it is released from carrying soldiers and munitions of war.

(3) During the war there have been restrictions against the subscription of new capital for private enterprise. Soon after hostilities cease these restrictions will have to be removed, or, at any rate, relaxed, in order that the world may restart its civil life. Belgium and other devastated areas will have to be rebuilt and restocked; new cottages must be built in every country; railway lines and rolling stock will have to be renovated; and a vast outburst of industrial activity in many directions will be required. Entrepreneurs will need money to finance all these undertakings. Again, during the war, restrictions have been imposed and voluntary abstinence practised in the matter of personal expenditure. Much of this is of a quasi-capital character, such as repairs to private houses, replacement of furniture, renewal of clothing, etc.; with the cessation of hostilities people will desire to make these arrears good and will in many cases be prepared to do so out of capital if they are not able to meet the expense out of income.

Combining together the demand that will be made for money by Governments and private persons in the first months after hostilities cease, it seems likely that it will even exceed the demands that have been made during the continuance of the war. And as there will be no new sources of money to be tapped, banks will be called upon to lend money to Governments and to private persons to an extent equal, or perhaps even greater, than they do to-day, thereby creating further inflation unless it be checked by specific means.

Apart from inflation the main causes tending to increase prices

will be (1) the dislocation of the industrial machine, which will reduce supply; (2) the psychological recoil from the restraint of war which will increase demand; and (3) the increase in the price of existing fixed capital (*e.g.*, houses), which will expand until it equals the prices at which similar new fixed capital can be produced.[1] The causes tending to lower prices will be (1) the release of ships' tonnage, which will increase and cheapen transit; (2) the increase of civil output arising from the redevelopment of civil life and improved methods of production; (3) the cessation of the great war profits and high wages in munition factories, which will reduce demand; and (4) the ending of monopolistic conditions. It is hazardous to guess on which side the balance will be, but, taking inflation and economic causes together, the confident hope of the man in the street that the cessation of hostilities will immediately and automatically see a big fall in prices is not at all likely to be realised; and it may very well be that months, perhaps even more than a year, will elapse before the natural causes tending to reduce them get the better of those which tend towards a still further increase.

The point may be expressed somewhat differently as follows:— During the war the world has devoted a great deal of energy to unproductive output, but it has minimised the effect of this upon commodities for immediate consumption by not merely ceasing to increase capital but by allowing it to be reduced. When the war is over this wastage will no longer be tolerated, and an increase of capital will be demanded. This creation of new capital and repair of old capital will not immediately yield an appreciable additional output of commodities. So long, therefore, as unproductive expenditure is still considerable and while dislocation is having its effect the output of consumable commodities may be actually less than during the war. People will therefore go very short. This they will endeavour to resist; and as their power to keep up incomes is in general greater than their power to keep down prices, prices would naturally rise.

Superimposed, however, on these conditions will be the result of any direct financial action taken by the Governments. For the most part such action will be national, but there is one proposal for world action which is put forward by Mr. Stilwell in the *Great Plan*. He proposes to issue world bonds to the total of all the war debts, and in effect to hand these over to the creditors

[1] I assume that rationing and price control, including the bread subsidy in Great Britain, will be continued for some time. If not, their removal will be a further cause of increase.

and to make them legal tender in all lands. Assuming it to be possible to put this gigantic project into operation the effect would be to flood the currency of the world with an addition of inconvertible paper to the face value of upwards of £30,000 millions. This unprecedented inflation would cause prices to soar to ten or twenty times their present level; all existing contracts and wage agreements would become impossible, and it is not too much to say that the whole financial system of the world as we know it would break down.

For the discussion of other schemes and proposals it is better to confine attention to a single country. In the times before the war all the great nations had a gold standard, and gold was free to be exported or imported by private persons. Consequently relative inflation of one country compared with another was speedily corrected by the flow of gold. Disregarding such temporary transferences, trade was based on an equilibrium of exports and imports. Imports *plus* interest on debts owed *plus* new capital lent to foreigners equalled exports *plus* carrying trade *plus* interest on old capital lent to foreigners *plus* new debts incurred.

During the war the gold standard has been abandoned by most of the belligerent countries, and though nominally retained by Great Britain, it is hedged about with such restrictions that gold is actually at a premium. Relative inflation, therefore, exists; and the equilibrium between exports and imports is preserved by effecting public and private loans and by selling existing foreign securities. Thus in the case of Great Britain, which has obtained an increasing excess of imports-from *over* exports-to America during the war, the balance of trade has been made good (1) by sales to Americans of American securities previously owned by British men and women; (2) by the British Government borrowing from American individuals; (3) by the British Government borrowing from the American Government. Such sales and loans have not produced inflation in this country, though by their means it has been possible for us temporarily to pay for the war without either increased production or abstinence.[1] They constitute a real case of our people throwing the burden of war on to the backs of their posterity. On the other hand, the loans made to the Allies during the war have meant increasing our exports as against our imports. The money spent by our Government in providing these exports has formed part of the total war cost, and has played its part in producing inflation.

[1] Mathematically they may be regarded as negative accumulation.

At the cessation of hostilities Great Britain will be confronted with a stream of imports far exceeding its exports. A great part of these imports are war material from U.S.A., the demand for which will stop with the peace, but the tonnage thus released will be immediately requisitioned for other purposes—food, other consumable commodities, raw material, and industrial capital generally. It will obviously be impossible for Great Britain in the earlier days of demobilisation to give an equivalent for them in exports, services (the ocean carrying trade), or gold. It is almost certain, therefore, that she will continue to borrow from U.S.A. This borrowing will, in all probability, be both through public and private channels, and will have three effects. First, it will equilibrate the exchange and prevent the drain of gold. Secondly, it will mitigate the inflation which the outburst of industrial activity in Great Britain would otherwise cause. Thirdly, it will pile up still further the adverse debt of Great Britain and make exports and imports more difficult to balance later on. Meanwhile the effect of the loans made to Allies during the war will be exactly the reverse. It is inconceivable that in the earlier stages of demobilisation full interest in the shape of goods or services will be paid to us from them, and it is not unlikely we shall have to continue to lend them "money" for some time. This will be a further drain on our resources for the time being, but, assuming the debt is good, will be to our benefit in years to come.

The principal financial issue which will confront all Governments at the close of hostilities will be that of the paper currency.

Four courses are theoretically possible: (1) to retain permanently the inconvertibility of paper; (2) to provide a basis for the paper other than gold; (3) to restore the gold basis gradually; (4) to restore it immediately.

(1) The general arguments against an inconvertible paper currency are well known. It destroys confidence, places the business world at the caprice of any Government which may be in power, and makes any personal provision for the future insecure. In the particular case of Great Britain it would deal a crushing blow at the great national reputation for sound finance and make it practically certain that London would not become again the financial centre of the world.

(2) Whatever merit there may be in basing the currency on a wider range of commodities than one precious metal (and of this more will be said below), it must be evident that the discus-

sion of any such course has not proceeded sufficiently far to-day to make either probable or desirable so startling an innovation in the transition period.

(3) and (4). There is little doubt that it will be decided to revert to the gold standard in this country, and the only question will be how rapid this return will be. The sooner it is effected the sooner will financial confidence be restored, foreign exchanges stabilised, and an opening provided for the reinstatement of London in its position of financial world pre-eminence.[1] But the full consequences of the reversion to a gold basis must be faced. It will mean, of course, (*a*) ceasing to issue unlimited Bradburys, (*b*) genuine convertibility, and (*c*) the free export of gold. But it will mean also that the relationship of the nation to its banks will have to be thought out afresh. It was seen in 1914 that the pyramid of credit which the banks had built up, and out of which they had made their profit, was unstable in the hour of crisis unless the nation's credit underpinned that of the banks themselves. Again, during the war inflation has brought unearned profits to the banks. Credit is a valuable asset. If, therefore, the banks are to remain in private ownership after the war, they must expect to have to pay something in the nature of an insurance premium to the nation for their right to the protection of the national credit in hours of emergency.

The return of Great Britain to the gold standard will bring about, for her, complete deflation relative to all other countries resting on a gold basis, but it will by no means suffice to undo the whole inflation brought about by the war, or secure a reversion to the general level of pre-war prices. While world capital and world commodities have been shrinking, instruments of credit have been expanding, so that even when resting on a gold basis the money measurement of wealth will be different from before.

Second only to the problem of the currency will be the problem of the war debts. One scheme of dealing with these on world lines has already been discussed and dismissed. Other schemes for dealing with them on national lines are the following: (1) indemnification by Germany; (2) speculative State enterprise; (3) repudiation; (4) capital levy; (5) annual provision of interest and sinking fund.

(1) It is not expected that Britain will claim a money indemnity from Germany for herself. If she were to do so it could

[1] The report of the Committee on Currency and Foreign Exchanges, issued after this article was written, supports this view, and says that it was the unanimous opinion of the Committee and all the witnesses.

only effectively be paid by imports of goods from Germany. These would probably have an injurious effect on British industry while they lasted and would leave Germany in a strong industrial position when the indemnity was finally paid off. Such an indemnity, if imposed, would tend towards deflation and lowered prices in this country.

(2) Mr. Wilson-Fox and others urge that the State should engage in large speculative enterprises in British dependencies and elsewhere at the close of the war for the purpose of meeting the interest on the debt. Such enterprises would involve the flotation of great State loans in order to raise the necessary capital, and these loans would be the cause of inflation. Further, the monopolistic conditions attached to the scheme would tend to raise prices.

(3) It is unnecessary to discuss the effect of repudiation on prices, because it could only be adopted as a revolutionary measure which would smash up the whole financial system as it exists to-day.

(4) The war debt may be wiped out in whole or in part by a levy on capital, which would be paid, not in money, but by transference of the title deeds of wealth. Such a levy would be paid by all citizens of the country possessed of more than a certain minimum, and would be graduated according to the amount of their estate. If this project be carried out, what effect will it have on inflation? It must be remembered that it is not the whole war debt which has caused inflation during the war, but that part of it which has been lent to the State not out of direct abstinence but out of bank credit. In the same way the levy will cause deflation not through the mere extinction of debt but through the extinction of that part of it which is being used for purposes of credit. But the levy will have a further effect in lowering prices which is psychological in its origin. So long as the war debt remains floating jointly on the country as a whole, its citizens will reckon their private wealth as it stands without deduction. When by the operation of a capital levy the debt has been shared out between them severally a soberer estimate will be formed and a stricter economy more in accordance with the true facts will be practised. In this way a reduction of consumption will bring about a fall in prices a part of which will be correctly described as deflation.

(5) If none of the above methods be adopted, or if any of them be adopted but a portion of the debt be still left in existence, there will remain the normal procedure of meeting the interest year

by year and providing a sinking fund out of current taxation. The only part of this which will affect price level will be the extinction of internal debt owing to the operation of the sinking fund. But as this is not likely to exceed an annual 1 per cent. its effect in the first few years of peace will scarcely be noticeable.

When extraordinary expenditure and extraordinary receipts have come to an end, when labour and capital have been demobilised out of the munitions works and out of the army and navy, when all temporary restrictions have been removed, when foreign loans arising out of the war, both in and out, have ceased to be created, then at last something like a steady equilibrium will be reached, involving the balance of exports and imports qualified in the usual way. This equilibrium for Great Britain will differ in important particulars from the equilibrium before the war. She will no longer be a creditor of the United States but a debtor to her. She will no longer have an almost exclusive share in the carrying trade of the world, but will have to recognise in the United States a formidable competitor. As a set-off against these factors the loans made to Italy and the other Allies and Dominions must be taken into account, but some of these countries are not likely to be able to pay interest on their indebtedness for many years to come.

In reckoning the effect of this new position on the external trade of Great Britain it must be remembered that immediately before the war she was advancing capital annually to colonies and foreign nations to the extent of some two hundred millions sterling. As, therefore, the interest on her lost foreign wealth and any loss that there may be in the falling off of her carrying trade, taken together, are not likely to amount to nearly so great a sum, she will still be able with the same exports and imports as before to increase her foreign wealth, but at a slower rate. No doubt she will endeavour to do much more than this by augmenting her exports.

As to the internal problem of the magnitude of the whole productive output, it is popularly anticipated that owing to the lessons learnt during the war—standardisation, the removal of harassing labour restrictions, the discovery of fresh processes, the introduction of women's labour—an immense increase in output will be available, causing a fall in prices. Undoubtedly all these factors will have an important bearing; but there are some to be set on the other side—the loss of capital during the war, the loss and mutilation of men in the prime of life, the demand for greater leisure, and, unless labour be granted a much

larger share in the distribution, serious conflicts between labour and capital. It would therefore be very rash to prophesy how far the popular anticipation is likely to be realised.

Inflation has undoubtedly brought many evils in its train, not the least of which has been the uncertainty of prices from day to day. It by no means follows that deflation will be a pleasant process. On the contrary, it will introduce a fresh uncertainty and gravely embarrass the entrepreneur. His bankers will make difficulties about accommodating him with money. He will start out with a process of manufacture to find at the end that the fall in prices has cancelled his anticipated profit and substituted a loss. He will have to "write down" his plant and stock when he makes up his annual accounts. He will endeavour to reduce wages and will have in consequence conflicts with labour. Deflation will ruin some entrepreneurs, will throw workpeople out of employment, and will depress trade generally. Nevertheless, these ugly consequences will have to be faced, for a world of permanently inconvertible paper would be a still graver menace to industrial stability.

The question arises, however, whether the Government should by financial means aim at speedy or gradual deflation. It has already been noticed that the period immediately following the war will naturally be a period of further inflation, and it is highly desirable that the Government should take this opportunity to introduce deflating action which will cancel the increase in prices which would otherwise take effect. Beyond this there seems to me a great deal to be said for getting as early as possible to a stable condition in which uncertainty no longer prevails and therefore for hastening deflation; but this will tend to increase the effective weight of the war debt if it has not been expunged by a levy on capital.

All such investigations point to the grave evils which are brought about by changes in general price level. These evils are inherent in any system of paper currency which has no stable basis, and are not wholly eradicated when the currency rests on the value of a single precious metal. Apart from the financial devices of a war there is always a risk that the discovery of a fresh source of gold, or new methods of production, or even widely extended forms of credit, will throw the whole basis of price into the melting pot. Against this uncertainty bimetallism affords no substantial relief. The only real safeguard is to base the currency not upon one or two commodities but upon all. This proposal sounds at first utterly impracticable, but in reality it is

quite feasible, as those who have studied Professor Irving Fisher's memoranda upon a compensated dollar will be constrained to admit. It may be a long time before such a proposal becomes practical politics, but the terrible financial difficulties which will follow the war cannot fail to start a train of discussion in which this project will be brought for the first time to the attention of the general public.

Summary of Main Conclusions.

The natural tendency of post-war events will be such as to cause in the transition period a further inflation and rise of prices. If this result is to be prevented, still more, if a fall in prices is to be brought about, Governments will have to take certain financial actions, foremost among which is the return to the gold standard. In this country in particular it is most urgent that this step should be taken with the least possible delay. Prices will also be affected by the method adopted of handling the war debts. Most of the schemes propounded would result in increased inflation, but a levy on capital would undoubtedly operate in the direction of deflation.

Several years will probably elapse before foreign trade reaches equilibrium, and in the beginning of this period for many months at least this country is likely to continue to borrow from America, and other countries will continue to borrow from us; these borrowings will increase the difficulties of the future and should be terminated as soon as possible.

Deflation will be a disagreeable process bringing in its train failure and unemployment; but it is a less evil than the continuance of an inconvertible paper currency. All fluctuations in general price level are injurious to business and they will never be completely eliminated until the currency is based on all commodities. This, though at present outside practical politics, is quite feasible, and is ultimately the only satisfactory solution.

F. W. Pethick Lawrence

GOLD AFTER THE WAR IN RELATION TO INFLATION AND THE FOREIGN EXCHANGES.

IN an article on "Currency and Gold now and After the War," in the March number of the ECONOMIC JOURNAL (1918), Mr. O. T. Falk remarks that "Dr. Cassel's theory that the movements of the exchanges are simply determined in the main by the quotient between the inflation of the different countries" appears to be quite untenable under recent war conditions.

If by inflation nothing else is meant than the rise in general prices compared with their level before the war, this proposition is no doubt untenable, and this has in fact been recognised in later articles by Professor Cassel himself.[1] Supposing, for instance, that a country were to place prohibitive duties on all imported goods, whereas some of its exported commodities could not be dispensed with in other countries, there is apparently no limit to the rise in prices of that country, although the rate of its exchanges with other countries might have remained at par during the whole time. While this could, perhaps, not be called inflation, properly speaking, at any rate the above result would be inevitable in such circumstances. Gold would merely pour in, and this influx could only be checked by an extension of the note issue within the country. The same result would follow if its import of goods were prohibited by measures taken on the part of other countries. This at present is precisely the case with Sweden. Our exports have been free, or nearly so; our imports, on the other hand, extremely reduced, and in many cases quite annihilated, as a result of the well-known political difficulties which happily are now coming to an end. The result, even supposing that the gold standard had been maintained by all countries, Sweden included, would have been a rise of prices in Sweden far above the level of prices in all other countries; as a matter of fact, Swedish prices have risen during the last year and a half much more than English prices, and they certainly would stand still higher had not the value of the Swedish krona been raised by the restrictive credit policy of our central

[1] See Professor Cassel's article below, p. 413.

bank and its refusal to accept gold in unlimited quantities, somewhat over that of the monetary units of most other countries.

This is the real meaning of the Swedish barring of gold, the only fault of which in my view is that it has not been carried through with the necessary strength and consistency. The present state of our price level may be regarded as the combined effect of three forces, of which two are working strongly in the direction of raising, and the third very slightly in that of depressing, prices.

(1) The general inflation of world prices;

(2) The cutting off of our imports during the latter part of the war, while our chief export articles have had a free sale;

(3) As the only counterpoise against those mighty influences, the gold and credit policy of the Bank of Sweden referred to above.

Mr. Falk believes that it would be an easy thing for England to bring back the exchanges to parity with neutral countries, and I suppose he does not except our country. Perhaps he is right in that, for the present. But if the gold policy of Sweden were carried to its last consequences, as in my opinion it ought to be, so that our central bank were to buy *and sell* gold at a price in notes decidedly lower than the legal mint price, I cannot see how it would be possible for any country to keep its exchanges at par with ours—except only by using precisely the same policy.

And here I come to Mr. Falk's remarks on the *rôle* of gold after the war, partly in controversy with an article of mine in this JOURNAL. "Is it not in the power of the Allies," he asks, "to maintain the rise of gold by a convention, if they wish to do so, and by maintaining the use of it to secure a powerful protection against its further depreciation?" If by the word "use" he means a proper or adequate use, I fully agree. If the Allied Powers were to co-operate for that purpose they might easily bring up the value of gold to any height. The simplest and, from a broader point of view, by far the cheapest way, would be to buy up all or most of the gold mines and *stop their production;* then gold would be sure to rise by and by. Or, they might by other contrivances, equally sure but not so cheap, increase the demand for gold among themselves so as fully or more than fully to keep pace with the supply. But if by *artificial* means you steady the value of gold in order to regulate your own currency in correspondence with it, you might as well regulate the value of your currency *directly* and not by the roundabout way of gold.

The principle, however—or, rather, the *fiction*—which lies at the base of the metallic theory is that gold will maintain

its value *by itself*, if only it is in general use as a *standard of value*. And this proposition I deny. That it is a pure fiction is shown to superfluity by the monetary history of the last forty-five years: the increase in the value of gold during the period 1873–96, its progressive fall in value during the next eighteen years, and its unparalleled collapse during the war.

Of course, it may recover once more, but that is not the point: falling prices are just as bad as rising prices; it is *steadiness* of prices and consequently of the standard of value that we want; a standard which is apt to vary in a short time by some 100 per cent. is worse than no standard at all; we could as well get on with a foot-rule of india-rubber. At any rate, the belief in the *natural* or *intrinsic* steadiness of the value of gold should by this time have disappeared for ever. The more so, if Mr. Falk is right, as I think he is, in his prophecy that the countries which before the war had a circulation of gold coins among the public will content themselves after the war with maintaining a paper currency, leaving their stocks of gold with the banks. If so, there is hardly any *real* factor left for determining the value of gold. Dr. Karl Helfferich (the present politician), no doubt one of the ablest German writers on questions of money, made some years ago (long before the war) the remark that the difficulties sometimes felt by the central banks in keeping a proper amount of gold were caused almost entirely by the *internal* market and the fluctuations of its cravings for gold in the circulation, and far less by the need of international gold payments. Indeed, those payments are every day, at any rate in peace time, getting less important, and the actual movement of gold from country to country is in the main reduced to the necessary distribution of the metal from the gold-producing countries over the world. If, then, the possibility of the internal drain, for which the banks hitherto had always to be prepared, is to cease altogether, the size of the gold stocks kept by the different banks relatively to the volume of trade and payments might fall to almost any extent without causing any *real* difficulty to the banks. Only when, in consequence of the rising prices of commodities, the diminished production of gold had become insufficient to answer even the industrial demand for gold, and the stores of the banks therefore became constantly diminishing, a reaction against the too liberal credit policy of the banks would *perhaps* set in, but this would be a very long vista indeed.

"International trade without a material standard of value is surely an impossibility," says Mr. Falk at a time when for about

four years almost the whole world has been living—and before that date about half the world was living—without any material standard of value at all. "We know," he goes on, "what chaos results even within a single State under a *régime* of inconvertible paper, and the world is not yet a single State with one supreme authority in currency matters." Can, then, the monetary system of Austria before the war, or that of India, be properly described as a chaos? But neither the former, nor, for several years, the latter of these countries had a material standard of value. Moreover, there is no need for a "supreme authority in currency matters," or for a central bank of the world, or anything like it. Each country might keep its own money just as now, regulating it in the usual way so as to keep its rates of exchanges at par with the leading commercial countries of the world. But as a change in a certain direction in the rate of exchange between countries A and B can be effected as well by A's raising its rate of discount as by B's lowering its rate, there exists obviously, as it were, a *second degree of freedom*: over and above the international regulating of the exchanges by discount rates moving in *opposite* directions there might come about by common agreement a general rise or lowering of rates in the *same* direction when needed in order to lower or raise the world's general level of prices, properly measured by some improved index method.

I hope for a monetary congress, which will be able to solve this question, which from a theoretical point of view meets with no difficulty whatever. If not, then every land had better regulate its own level of prices, even though it thereby sacrifices the parity of its exchanges with the rest of the world, which, commodious and desirable as it no doubt is, after all must be regarded as a matter of only secondary interest compared with the former.

KNUT WICKSELL

ABNORMAL DEVIATIONS IN INTERNATIONAL EXCHANGES.

According to the theory of international exchanges which I have tried to develop during the course of the war, the rate of exchange between two countries is primarily determined by the quotient between the internal purchasing power against goods of the money of each country. The general inflation which has taken place during the war has lowered this purchasing power in all countries, though in a very different degree, and the rates of exchanges should accordingly be expected to deviate from their old parity in proportion to the inflation of each country.

At every moment the real parity between two countries is represented by this quotient between the purchasing power of the money in the one country and the other. I propose to call this parity "*the purchasing power parity.*" As long as anything like free movement of merchandise and a somewhat comprehensive trade between the two countries takes place, the actual rate of exchange cannot deviate very much from this purchasing power parity. Even restrictions of trade will not cause the rate of exchange to move from this purchasing power parity as long as they strike the trade in both directions equally. However, as I have tried to show in my book, "Dyrtid och sedelöverflöd" (Stockholm, 1917), if the trade between the two countries is hampered more severely in one direction than in the other the rate of exchange will deviate from its purchasing power parity. If the imports of a country are more severely restricted than its exports the consequence will be that foreign money will sink in value, as claims on such money will be comparatively easy to procure, but difficult to make use of. A country whose imports are impeded from all sides, but whose exports are relatively free might in this way see its money go up in value in foreign places considerably above the rates which would correspond to the internal value of this money as it is expressed by its purchasing power within the country.

This I think is, under the present circumstances, the case with respect to several neutral countries, and especially with Sweden. In February, 1916, the Swedish Mint was closed to the minting

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of gold and at the same time the Riksbank was released from its duty to buy gold at the mint par.[1] From that time the Swedish currency was freed from its connection with the metal gold, and its value in comparison with foreign money could be expected to be governed only by its relative purchasing power.

This seems indeed to have been the case during the first year subsequent to the above date. But during the course of 1917 it became clear that the internal value of Swedish currency no longer corresponded to the high value of the Swedish exchange in foreign countries. And in 1918 the deterioration of Swedish money has advanced so far that its purchasing power is now, probably, even more reduced than that of sterling. Nevertheless the sterling rate of exchange was lately quoted at about 14 crowns as against 18.16 as the old mint parity. So far as can be judged the purchasing power parity must at present lie considerably above even this old mint parity. At the same time the general level of prices in England stands, according to the *Economist's* index, at about 250 in comparison with 100 before the war. And even if this index does not, for reasons which are well known, represent the full real rise of prices, the error is hardly so great that the English inflation could be estimated at anything like as much as 330, which is the approximate figure for the Swedish inflation in the autumn of 1918.

That in spite of this Swedish currency is valued in England very much above its old mint parity is, from a scientific point of view, a very interesting fact, the true interpretation of which is also, under the present circumstances, of the highest practical importance. The explanation must, according to what has been said above, be the exceedingly severe hindrances which are put in the way of Sweden's imports and which surpass, considerably, those in the way of her exports. The result of these artificial conditions of Sweden's international trade has been an unprecedented accumulation of assets in foreign countries together with a great import of Swedish securities from abroad. This involves an export of capital on a scale which, indeed, far surpasses the economic power of Sweden. The foreign and internal claims on the capital of the country have together exceeded her accumulating capacity, with the consequence that fresh credits in Swedish crowns could only be obtained by measures involving creation of new money and further inflation of the monetary standard of the country.

[1] *Cf.* my article, "The Depreciation of Gold" [ECONOMIC JOURNAL, September, 1917].

When foreign countries complain of the high price which they must pay for the Swedish crown they in reality complain over a state of things which is not Sweden's fault but is the inevitable result of the hindrances which these countries themselves lay on imports to Sweden. If the same foreign countries would only send Sweden more goods they would have it in their power to bring down the international value of the Swedish crown as much as they liked, right down to its purchasing power parity, which would mean a sterling exchange of at least 18.16 crowns to the pound, perhaps even more. And when they, in order to escape from the present high costs of procuring means of payment on Sweden, claim fresh credits in Swedish money, they choose a way which is more injurious for the Swedish monetary standard and therefore for the whole economic life of the country, and which, moreover, is not at all so advantageous to the interests of the credit-claimers as it seems to be. Furthermore, the policy of this excessive credit-claiming must clearly prove a failure in so far as the object is to improve the rate of exchange and thereby to get Swedish goods at a lower price. The rate can no doubt be improved in this way, but only at the cost of a further inflation of Swedish money and, consequently, of a corresponding rise of the general level of prices of Swedish goods.

If the goods which are demanded from Sweden were paid in the normal way by goods, there would be no need of Swedish credits. It is an economic paradox that the whole world should ask credits from a country which, owing to her being cut off from imports in payment for her exports, stands in reality at the margin of starvation.

G. Cassel

REVIEWS

The State and Industry During the War and After. Papers by H. SANDERSON FURNISS, JOHN HILTON, and J. J. MALLON. (Ruskin College, Oxford : Reorganisation of Industry Series : IV. 1918. Pp. 84. Price 1*s*. post free.)

THIS report of a Ruskin College conference of working-class associations, held at Manchester on May 10th and 11th, like its predecessors, will give the future historian some little help towards discovering what the more thoughtful members of the working class were thinking in 1918, though the discussions on the papers seem to have been scarcely so vigorous as at some of the earlier conferences.

We may note the strange persistence of the idea that private enterprise is to be blamed for being discovered unequal to the task of carrying on the war. Before the war did anyone ever suppose that it was the business of private enterprise to carry on war? The business of private enterprise was to provide people with the things they were prepared to pay for under a *régime* of peace and order maintained by the various civilised States. Suddenly, in August, 1914, several of these States deserted their *rôle* of preserving peace and order and began instead to kill each other's subjects, to steal each other's subjects' property so far as they could, and to destroy what they could not carry away. And then, when private enterprise found itself somewhat incommoded by these proceedings, it is said to have "broken down" and the various States are said to have "come to the rescue" with their moratoriums and their floods of paper money with which they doubled prices while pretending to protect their subjects from the greedy profiteer. Verily, a precious kind of rescue!

Mr. Furniss on "The State and the Citizen" is not impeccable on this matter, but Mr. J. J. Mallon on "The State and the Consumer" is a much more determined advocate of the theory that the State has shown great industrial capacity. To illustrate "the creative work" of the Ministry of Food he says :—

"In 1913 the consumption of butter in the United Kingdom was 16½ lb. per head per annum, and of margarine 4½ lb. per head; that is, the consumption of butter was nearly four times

that of margarine. To-day the weekly output of home-produced margarine is three times what it was in 1913, while imported margarine in January stood nearly at the 1913 level. The import vital a few months ago is no longer essential. In a few weeks the United Kingdom will have become self-supporting in margarine production."

Mr. Mallon may live to contribute to the epitaph of the semi-feudal State which tried to become industrial in its old age, and his contribution will be: " Its subjects had butter, and it gave them margarine instead." Mr. John Hilton on "The State and the Producer" is a good corrective to Mr. Mallon. In its control of shipping, he remarks with pungent humour (p. 56), " the Government appeased the very natural indignation of the public at the expense of the public's stomach." He reminds his hearers that while the hurry of the period has certainly been inimical to success, the State has been enormously assisted by the patriotic fervour engendered by the war, and by the fact that it took over going concerns—" there is a momentum about a going concern which will carry it a long way, even though the initial energy be cut off, as has often been seen when the able founder of a business has died and left his fool son to carry on." He might have added that the reckless borrowing and emission of paper money carried out by all the belligerents gives both the lenders of the money and the receivers of the bonuses and subsidies paid out of it a delusive feeling of prosperity, but cannot continue indefinitely. The State has certainly done greater things than anyone expected: no one before the war ever thought the British Government would *borrow* annually a sum equal to the whole pre-war yield of the income-tax in order to pay a part of the cost of the people's bread. Glorious achievement! " Men," says Mr. Mallon, " no longer gamble or speculate in wheat, or, in the old sense, no longer make profit out of it." How to reconcile his belief in the Government's success in buying and in preventing inordinate profits everywhere with the fact that about two thousand millions can be subscribed to war loans in a year, he does not explain. The only tolerably acceptable explanation yet suggested is that the Government departments shovel out money so liberally that some people are receiving amounts enormously greater than they received before the war. Mr. Mallon's economical State pays them too much, borrows back much of what it has paid them, . . . and each year saddles the taxpayers with another hundred millions a year of interest in perpetuity.

EDWIN CANNAN

The Human Needs of Labour. By B. SEEBOHM ROWNTREE. (London: Nelson and Sons. Pp. 168.)

MR. ROWNTREE has in this book estimated the lowest weekly wage on which a man can adequately provide for himself and his wife and his children (up to the age of fourteen) under modern urban conditions. The weekly budget for a family is considerably more liberal than that used in the author's former work *Poverty* in regard to clothing and personal expenses, and slightly more liberal in food. The question considered is, in fact, not what is the least sum on which life can be supported without impairing efficiency when all possible economies are practised, but rather what is the sum on which the conventional standard of the unskilled workman can be reached when there is no careless waste and no extravagant expenditure. The calculation does not therefore rest on a purely scientific basis, and is consequently not open to critical abstract analysis; we have rather to consider whether the standard adopted is reasonable in relation to the needs of the workman, having regard to his habits and environment.

From this point of view little exception can be taken to the calculation. The estimate for food is almost exactly the same as the amount actually expended by the average unskilled workman's family in the Board of Trade's 1904 budgets (allowance being made for price changes to 1914); the sum as expended yielded definitely fewer "calories" than the physiologists, whom the author follows, consider necessary for efficiency, though food experts could make it yield (on paper) considerably more. Fuel is taken nearly at the quantity allowed this winter by the Coal Controller. Rent is to be taken as that actually prevalent for a house with four rooms and a scullery in the workman's district. Household sundries, which must include repairs and renewals, are reckoned moderately. The only sums open to criticism are the 5*s*. weekly allowed for insurance, trade union, and other subscriptions, tram fares, and pocket-money, and 5*s*. weekly for clothing, in each case for the family of five persons; for much smaller sums have hitherto been made to suffice by families whose means are very narrow. Though there is no doubt that this 10*s*. weekly could be usefully spent, it is doubtful how far conventional standards of clothing and pocket-money should be taken into account in fixing a legal minimum.

The estimate on this basis for a family consisting of a man, wife, and three children under 14 years is 35*s*. 3*d*. (including 6*s*.

for rent) at the prices of 1914, which is some 10*s*. higher than the pre-war rates for unskilled labour and equal to the wage of the lower ranks of skilled labour at that date. The question at once arises as to how a man with 25*s*. paid his way, and the answers are as follows. First, personal expenses were much lower than 5*s*.; where there are three children and no additional source of income, 3*s*. or more must be taken off this sum. Secondly, clothing was obtained, partly second-hand at extraordinarily cheap rates, partly from gifts of relatives and others, partly from extra earnings, partly at the expense of food, and the standard was lower than that represented by 5*s*. weekly. Thirdly, less than 6*s*. was paid for rent, and the houses were crowded and unsatisfactory. Fourthly, the children's and probably the wife's food cost a smaller proportion of the man's than is here reckoned; there is a possible flaw in the usual calculation by which it is reckoned that the cost of feeding a child eight years old is one-half that of feeding a man *because* he needs half the nourishment, for the child's nourishment is obtained from bread and margarine, which are much cheaper forms of food than meat and bacon; also children can obtain free meals at school. But when all allowance is made, the explanation is in effect the simpler one that large numbers of the children were underfed. Fifthly, in Mr. Rowntree's calculation the costs of satisfying the needs of the different members of the family are simply added to get the total, whereas in a family group there is elasticity and give-and-take, resulting in a certain saving. Though the standard reached by the unskilled working class was unsatisfactory from every point of view, and there would be every reason for welcoming an improvement, it must be remembered that the standard in England immediately before the war was considerably higher than in the generations preceding that time, and higher than that generally reached in the towns of Europe.

The questions, whether the establishment of a legal minimum wage is possible or desirable or would be effective, are only very lightly discussed in the book, but the whole analysis is directed to ascertain the level at which it should be fixed, assuming the principle to be granted. From a very interesting and successful statistical examination of the numbers of children of different ages in the families of York, the author reaches the conclusion that in 33 per cent. of the families[1] there are more than three children to be provided for at one stage of the family history,

[1] These being the more prolific families, the relative number of *children* are much greater, viz., 62 per cent. and 80 per cent.

and in nearly 50 per cent. more than two children; and he argues that a wage will leave a very great number of children unprovided for unless it is based on the requirements of three children, as in the estimates described above. Other investigations have also shown that a very large proportion of children belong to families which for a shorter or longer period have been below the standards adopted as the poverty line.

The author does not discuss at what age the minimum wage should become compulsory, but it is evident that the idea is that it should commence at about the age at which a man usually obtains a full standard wage. The fixing of a higher age would lead to some discrimination of employment in favour of the younger. The minimum would, of course, continue throughout working life. Thus to meet the five years or so of stress that comes to men who have three children, it is argued that a wage should be fixed that on the standard adopted would leave a margin over "human needs" for all men before marriage, for all in the first few years of marriage, for all who bring up less than three children, and for nearly all men over about 40 years, by which age there are seldom three children still at school; while in the end the wage would leave unprovided for a very considerable proportion of the children in larger families. It is, of course, realised that there would be an excess for the young and the elderly married couples, and it is argued that in the earlier period the money would be useful for establishing the home, and in the later for providing for old age; this may readily be granted, but it would apply equally if the wage were fixed at double the amount. It may be added, however, that the surplus can be (and no doubt is, to some extent) applied to help relatives who are passing through years of stress.

The fact that really comes out of the analysis is that a married man with children needs 35*s*. (at pre-war prices) to be fairly comfortably off between the ages of 30 and 40. This is the best working period of a man's life, and most men are prepared to make extra exertions, and to take their work responsibly and seriously, when they have to provide for a growing family. There is something wrong in a wage system that allows no promotion and no higher rate of pay to a man when he comes to maturity, and something wrong with a man who is content to remain at the level he reached when he was 23 years old. Among the new ways that are being explored for increasing wages, that of developing the individual's latent faculties and providing avenues of betterment should be very seriously explored. Meanwhile the

very pressing problem of how to save children in large families from insufficiency of nourishment should not wait till industry is reformed.

A minimum standard is also calculated for a woman without dependents, living with her parents or lodging with another family, and this is put at 20*s.* a week at pre-war prices. This standard is much higher than that allowed previously in the family budget, for there an adult woman's needs are taken as met by 3*s.* 6*d.* for food and about 2*s.* 9*d.* for share of the house and fuel, while in the second case 12*s.* is allowed for board and lodging and laundry; and while the whole family has 10*s.* for clothing, insurance, and pocket-money, the single woman is allowed 8*s.* An independent economic life is thus relatively expensive.

A. L. BOWLEY

The Business of Finance, by HARTLEY WITHERS. (John Murray, 1918. Pp. 234. 6*s.* net.)

IN this book Mr. Hartley Withers, quite naturally, reproduces, but in a new form, much of what he has already written in earlier works, and it is none the worse for that, for many of the points upon which he insists—or "platitudes," as he sometimes modestly calls them—are of a kind which at the present time can hardly be urged too often. For instance:—

> All who are interested in the sanity and sense with which finance is conducted will have to do their best to impress on those whose economic education is deficient that you do not make people really any better off by plastering the world with paper promises to pay, but that what does mankind real good is stimulating the production of good things to put into its stomach, stout clothes for it to wear, good houses for it to live in, and sound education to make it see straight in matters of finance and in doing its duty to its neighbour. (P. 73.)

The activities of finance are defined as

> the manufacture and provision of currency and credit, the handling and distribution of the capital that is saved by the community and put into the equipment of industry, and the collection and spending of the revenue of the nations, and the raising of debts for any purposes that they choose to pay for by this means. (P. 12.)

The various chapters deal with these topics. The book is written in the author's usual attractive style, and he dispenses with much of the tedious detail which both teachers and students have learned to associate with textbooks on money. There is no tiresome list of the various commodities which were used as money prior to the introduction of gold, and an enumeration of the requisites of money, all ending in -ility, will not be found in Mr. Hartley Withers' pages. Instead of these we have refreshing remarks like the following on the adoption of gold as the medium of exchange:—

> Perhaps it was just as well that man should have insisted on prettiness as the most essential point in the article that he was prepared to take in the certainty of being able to pass it on when he wanted other goods or services. The amount of labour that he has sunk throughout the ages in digging for the precious metals may some day astonish his more rational descendants, but it would have been even worse if some really useful article had been devoted to the purposes of a medium of exchange. (P. 26.)

The book covers a great deal of ground and the treatment of some of the subjects discussed is, perhaps necessarily, rather thin. The concluding chapter particularly, or that part of it which is devoted to an explanation of some of the principles of taxation, is decidedly inadequate. However, most that is essential in the theory of money and credit is to be found in the volume, if it is not always fully discussed. The quantity theory is clearly stated, and it is shown that "it can only . . . be upset if it is complicated by irrelevant issues" (p. 47). There is a good discussion of the relative advantages and disadvantages of rising and falling prices, a very lucid explanation of the Bill of Exchange and the Foreign Exchanges, some excellent remarks on the duties of investors, with suggestions as to the possibility of some guidance being given to them by the leaders of finance, a good discussion of the difficulties and dangers of investment abroad, and so on.

We should, however, have liked to see some of the monetary and financial problems which are mentioned more fully treated, such as, for instance, the desirability of restoring the sovereign to circulation after the war, and the possibility of demonetising gold. The statement that under collective ownership the wages of capital will still have to be paid is open to criticism, that is, if interest is meant by the phrase "wages of capital" (p. 103), but we are not quite clear as to the meaning of this passage.

We have noticed three small slips. "Its" should be "their" on p. 63; "capital" should be "money" on p. 92; and can a "blemish" be used as a "brickbat," even by the critical? (p. 147). But these are all minor criticisms, and the book should be most useful as a textbook, and especially as a supplement to *The Meaning of Money*. The introductory chapter strikes a note of high idealism which is rare in works on finance, and it is to be hoped that financiers will take to heart the following :—

> Bankers, financiers, stockbrokers, bill discounters, have to remember that earning a profit for themselves or for stockholders is not the beginning and end of their business, but that they are in charge of a big wheel in the great machinery of production and distribution of wealth, and so helping the progress of mankind to a better state of mind and body. (P. 5.)

H. SANDERSON FURNISS

The Social Basis of Co-operation. By PROF. M. TUGAN-BARANOVSKY. Published by the University of Shaniavsky.

UNDER the above title a book was published in Moscow about the end of 1915 or the beginning of 1916, by Professor M. Tugan-Baranovsky, who is well known in Russia as an economist. According to the author's preface the book has a double purpose to serve : as a manual for university and other students who are interested in the subject of the co-operative movement, and at the same time to build up " a general theory " of this movement. The necessity for such a new book, especially as regards the " general theory," is explained by the author by the fact that " in spite of the extraordinary number of books, pamphlets, and articles written on co-operation, there is rather little written from the scientific point of view.".

" In particular," says he, " neither in the Russian language, nor in any other, is there a book which aims at giving a general theory of the co-operative movement in all its aspects and which might serve as a general course for students of co-operation."

And I must acknowledge that what Professor T. Baranovsky has promised in his preface has been well fulfilled. He has given us a big volume of about 520 pages, fully stocked with facts, figures, and comments which make instructive and interesting reading for students as well as for " theorists."

If among his facts and arguments there is nothing new,

nothing which has not been said or was not known before by students and workers of the co-operative movement, the merits of the book are nevertheless great, as it comprises almost all the aspects of co-operative trade, and production, and the whole is penetrated throughout with one idea which is partly reflected in the title of the book. This idea may be formulated as follows: The character and the development of the co-operative movement depend on the economic status of the persons who join it. Professor Tugan-Baranovsky, using the old terminology inherited from Proudhon, Granier de Cassagnac, and chiefly from Marx, employs the word "class" for the designation of the economic status, and thus the co-operative movement becomes, accordingly, a class movement. Hence the prosperity and success of a co-operative society, as well as the forms of its activities, depend, it would seem, on the class to which its membership belongs, not on the devotion of the members to the principles of co-operation, on the idealistic yearnings and aspirations of their leaders, nor even so much on the skill, practical knowledge, and honesty of their servants, but purely on class-consciousness, on the economical needs and economic advantages of the members. Thus, if the representatives of a certain class have formed a co-operative society which corresponds to their economic interests and does not meet a too great opposition from the opposite class or from the surrounding conditions, then the venture may prove successful, the society may grow, its turnover may increase, although, speaking generally, Professor Tugan-Baranovsky does not believe in the capacity of the co-operative movement to grow to such an extent as eventually to conquer capitalism.

According to this class-theory, Professor T. Baranovsky divides the co-operative movement into three branches: the proletarians, the peasants, and the small traders' (or, as he calls it, "small bourgeois") co-operation. The "proletarians," that is, the wage-earning working class, have found societies of consumers most suitable to their economic position. Credit societies, on the system of Raiffeisen loan banks and such forms of co-operation, which facilitate the selling of agricultural products and the buying or use of machinery, manure, seeds, etc., have proved to be more adaptable to the requirements and circumstances of the peasantry. And, lastly, the small trader and artisan, that is, the man who works not as a wage-earner but independently by the help of his own small capital or labour, find it more suitable to make use of co-operation in the form of credit banks originated by Schulze-Delitzsch. It is not that the peasants or the small capitalists

and artisans have not tried to build up co-operative societies for distribution, or that the wage-earning classes did not try other forms of co-operation besides distribution; but only that each class succeeded in such a form of co-operation as answered best its economic conditions, and not otherwise.

Now it would be futile to deny the evident fact that the economic position of the person plays a very great part in his actions. There is practically no human action which by some stretch of logic cannot be reduced to economic causes. The co-operative movement is certainly no exception to this. But to call this movement a class movement, and to ascribe its failures and shortcomings, or its progress and successes, exclusively to the needs of a class of people, and to explain all its issues by the class theory is, to say the least, overstraining one's faculty of logic. Even Professor T. Baranovsky very often quite forgets about his class theory and in a most inconsistent way says things which even the "Utopians" of the co-operative movement who altogether denied the basis of "class-war" could easily repeat. Thus in discussing the difficulties of building up a successful co-operative society he asks: "What then is it causes people not to give way to all these difficulties and to overcome them triumphantly?" "Evidently," answers he, "only the interest in the common cause, the social enthusiasm, without which successful co-operation is impossible" (p. 102).

Speaking in particular of the distributive societies he says: "Although at present the organisation of a consumers' society does not require as much initiative and idealistic impulse as in the times of Robert Owen, nevertheless, even now, without the moral element, the element of idealism, no success of a proletarian co-operative business is possible. Where then comes this enthusiasm from? It comes from the consciousness that the co-operative society serves not only the selfish aims of its members, but also fulfils some important purpose. Only high social aims are able to evoke enthusiasm. That is, the co-operative society of consumers can induce its members towards some sacrifice only in the case when the society acquires in the eyes of its members some idealistic value. It is necessary that the members of the society should love it, and should look upon it as upon something which is more sacred than one's own interests. . . . Where there is no such group of men devoted to the cause of co-operation there can be no successful co-operative undertaking" (pp. 154–155).

According to these quotations, taken from Professor T. Baranovsky's own book, we have as much right to say that the

co-operative movement is an idealistic movement as to say that it is a class movement. It is true that there are some extreme Marxians—and Professor T. Baranovsky seems to follow them—who assert that idealism by itself is a "proletarian category," that is, that the "proletarian class" is the only repository of high ideals, of great social and humanitarian aspirations. However, in war-time paper is too expensive to waste it on refuting such absurdities. Evidently people with such views on human feelings and on the unending struggle of the soul of mankind would call even Prometheus, the immortal god, who suffered for the human race, a "proletarian," and endow him with "class consciousness," and, I should say, Buddha, who left his throne, parents, wife, and only son, and went to live among the poor and wretched, would be counted by them among the representatives of "class feeling."

Certainly, very much depends on what is meant by saying that the co-operative movement is a class movement. Professor T. Baranovsky seems to think that as the forms of co-operation and the progress and evolution of the movement depend on the class of persons who join it, therefore the movement is a class movement. He, for instance, finds that societies of consumers have been especially successful among mill workers. The Rochdale Pioneers have been mill workers. Co-operative stores are spreading more in the North of England, with its manufacturing, wage-earning working classes, than in the South of England, with its dominating agricultural and bourgeois population. And so on. And, accordingly, the store co-operative movement is a purely "proletarian" movement. "Co-operative distribution," says he, "can be developed among all the three social classes, among which only is co-operation possible, that is, among the proletariat, peasantry, and small bourgeoisie. But its full development, co-operative distribution, can reach only among one social class, the proletariat, and then only in the towns" (p. 183). And the explanation of this is: because certain forms of co-operative distribution mostly satisfy the needs and correspond to the circumstances of the class of proletarian. But, if on account of this the co-operative movement is a class movement, then every little store of a private trader in some back street which by its commodities, prices, and so on is adapted to the needs, tastes, and economical circumstances of the surrounding poor population, is also a "class movement," and a "proletarian" one, as distinct as, say, from Harrod's or Liberty's, which provide for the rich. Here lies the whole fallacy of calling the co-operative movement a class or

proletarian movement. If it is a proletarian movement, it is not on account of the fact that the membership of the co-operative societies belongs to the class of proletarians, but because its ultimate purpose is more for the good of the poor than of the rich. Even if the co-operative societies were to consist of rich only and did not include the poor at all, it would still be a proletarian movement so long as co-operation implies the ideal of commonalty, of the good for all, of the amelioration of the lot of the poor In this broad, idealistic sense Christianity in itself, and, for the matter of that, every other religion, is a proletarian movement. Even if the membership of the Established Church of England consisted only of big landowners and high official classes, this would have nothing to do with the teaching of Christianity, which is in essence "proletarian."

The question whether the co-operative movement is a class movement, and if so in what sense it is a class movement, is not only of theoretical importance, but has also a practical value. Take, for instance, the question of international co-operation. One is astonished in reading through the 520 pages of Professor T. Baranovsky's book, not to find a line devoted to this most important aspect of the co-operative movement. It is true that there is a small chapter with the heading "International Alliance of the Proletarian Co-operation," but the attention of the reader is drawn there, not to the international co-operative trade, nor to the aspect of future possibilities of such a trade, to its bearings on the development of the movement, to its relationship with the questions of peace and war, tariff reform, international brotherhood, and so on. No mention is made of this side of the question, and the few pages constituting the chapter are given up to the tale of the class quarrel which at the International Congress of 1904 at Budapest arose between the "proletarian," "peasant," and "small bourgeoisie" branches of German co-operators.

Now such an omission in a book which pretends to be an all-comprising manual and a theoretical exposition of the co-operative movement can be explained only by a very crumpled, narrow, and one-sided view of the "class theory." Even admitting that the peasant co-operator has nothing to do with the mill workers' co-operative undertakings, that each one works in his own interests, and the interests of these two classes, not to speak of the third class, the small bourgeois class, are opposed to each other, yet by sheer economic forces international co-operative trade is bound to become one of the most important features of the co-

operative movement. The co-operative societies of each country will in the nature of economic evolution, with the increase of their trade and membership, enter into trading relations, and it wants only the stimulus of idealism, the guiding spirit of human brotherhood, and the proper understanding of what co-operation really means, to make international co-operation a real force in international relations.

SEMEN RAPOPORT

Die Wirtschaftsentwicklung der Karolingerzeit vornehmlich in Deutschland. By ALFONS DOPSCH. Two volumes. (Weimar: Hermann Böhlaus Nachfolger. 1912 and 1913. Pp. x+373 and viii+364. M. 18.)

PARTLY because of its position at the portals of the age of Feudalism, and partly because of the remarkably large share which has fallen to its lot in the very uneven distribution of source material, the Carolingian Empire has been depicted as possessing an unusually clearly defined civilisation, so that its institutions furnish a welcome basis and starting point for the investigator of those of the ensuing Feudal Ages. The dominating personality of Charlemagne, whose genius for organisation is revealed in so many capitularies, has created the conception that the civilisation of this age is largely the product of his legislation. Not only have the institutions of his Empire been shown to have been the product of Charlemagne's genius, but likewise the economic life has been represented, by such writers as v. Inama-Sternegg, as having virtually been created by a piece of legislation: the Capitulare de Villis, a law which was used to throw an additional lustre on the ruler of Western Christendom, the mighty conqueror, who nevertheless, to quote a French historian, *ne dédaigne pas d'entrer dans les détails d'apiculture*, a conception that shows a rather remarkable similarity to the witty satire of Bishop Theodulf of Orleans when he says :—

In medio David sceptro regit omnia, largas
Disponens epulas, ordine pacifico.

This hitherto generally accepted theory that the Carolingian economic system represented the economic reorganisation of Western Europe after the chaotic times of the Great Migrations, in general, on the basis of agriculture on a large scale with the "villa" as organ of collection and distribution, has suddenly received a rude shock at the hand of a Viennese scholar, Alfons

Dopsch, who after working as an associate of Mühlbacher in the editing of Carolingian diplomata, and later turning to the Austrian urbaria, in his *Wirtschaftsentwicklung der Karolingerzeit*, has taken up the economic problems of that age. That which gives the book its peculiar character is the fact that Dopsch is a diplomatist, and not an economist, and that while he cares nothing for economic laws and theories, there is little which the sources can hide from him. The older school of economists supported their theories with the facts offered by the sources, which theories not infrequently influenced the interpretations. Dopsch, on the other hand, starts, as it were, from the other end, and investigates the sources as such, in the light of other material of the time, and presents them with all accompanying circumstances, which only too often prove that the meaning of a certain passage is entirely different from that which it seemed to have on the surface, and which the economists had given to it. A specific instance will make this more clear. Inama-Sternegg, in search of a reason to explain the change of economic conditions which took place during the Carolingian epoch, found the Capitulare de Villis, a piece of legislation which fitted the situation excellently, and hence used it to show how this change was brought about. Dopsch, on the other hand, as will be shown later, analysed the capitulary from every possible angle, compared it with chronicles, records of synods and church councils, and every other available bit of material, and reached the conclusion that it is a mere local regulation for one manor. The result is, that the Capitulare can no longer serve as the basis for the economic conception of its time. Dopsch does not investigate the soundness of the economic theories, and he does not try to present any of his own, except to a very limited extent. What he does is to investigate the foundations upon which the theories are based, to investigate the sources, and to find, repeatedly, that they really mean something entirely different from what had previously been assumed. Thus a very large part of the foundations on which the system had been constructed are demolished, and the whole superstructure is left by Dopsch to fall in ruins, as the conclusions drawn from the sources are of no further concern to him.

In the introduction to the first volume, Dopsch himself says that it is not his intention to write a new book on the Carolingian economic conditions, and the great revolution of conceptions due to the altered interpretation of sources which might be caused thereby is virtually disregarded. This re-examination of sources naturally brings Dopsch into frequent conflict with the results

of the studies of Inama-Sternegg, Maurer, and other economists, which factor gives the book the character of a polemical commentary on the book of Inama-Sternegg.[1] But, on the other hand, wherever in his analysis Dopsch finds that one of these economists has reached the same conclusions as he himself, their interpretations are accepted without further proof, which practice undoubtedly constitutes a weak point of the book.

Of the actual conclusions reached by Dopsch, the most brilliant is undoubtedly the proof that the Capitulare de Villis is not a Carolingian law, but a local set of instructions, and it might not be out of place to show the methods by which Dopsch reaches some of his conclusions in this connection.

By a careful analysis of the provisions of this capitulary Dopsch finds that many of the chapters (such as, for instance, the one concerning fish ponds) enjoin the remedy of abuses which have crept in, and order the return to former conditions, which deprives the Capitulare of its character of a piece of constructive legislation. In the second place, Dopsch shows that the Capitulare was not issued by Charlemagne at all, which is evidenced to some extent by the fact that it is not included in any of the contemporary collections of capitularies. A number of provisions, such as the personal report of the judex, the personal appeal of the servus, point to the fact that the Capitulare is applicable to a limited area only, and to determine where this is located, Dopsch uses the famous catalogue of plants. It has been noticed that a number of these plants are characteristic of a mild climate, and, using the law of probability, Dopsch assumes that they grew in the Southern region, rather than taking the usually accepted explanation of this passage, namely, that this is an indication of an attempt of Charlemagne to grow almonds and oranges at Aachen. Dopsch therefore localises the Capitulare in Southern France, where all of the trees would naturally grow, and he finds that those plants which have most obstinately eluded identification by the historian and the botanist, are native of this area. The mention of wolves which had led some to localise the Capitulare in the Ardennes, agrees with a passage in the Annals of St. Bertin concerning the frequency of wolves in Aquitania. If we remember that Louis the Pious was King of Aquitania from 781 on, he and Irmengard are the only persons to whom the titles of Rex and Regina could apply, the latter title especially one that has caused much trouble, and given rise to very complicated conjectures. The conjecture of Dopsch agrees most remarkably with passages from

1 *Deutsche Wirtschaftsgeschichte*, Pt. I.

the chronicles, especially those which refer to the inventions of Louis in the art of war, references to which we also find in the Capitulare.

Closely connected with this Capitulare is the Brevium Exempla, which Dopsch shows to be merely a copy of the accounts of the monastery of Aniane, the centre of monastic reforms emanating from Louis, to which copy had been added similar material for Augsburg and Staffelsee. These arguments concerning the two documents are clinched by a brilliant piece of source history, in which Dopsch shows that the only surviving manuscript of the Capitulare de Villis and the Brevium Exempla, now in Wolfenbüttel, were brought there by the humanist Flaccus from Reichenau. Its catalogue, dating from the ninth century, mentions a book which can be only the Wolfenbüttel manuscript. The two documents were brought to Reichenau from Aniane by Tatto, later Abbot of Kempten, who was at Aniane in 817, and who, as we know from the studies of Patetta, was greatly interested in agricultural administration.

At this point, however, Dopsch stops, and while the Capitulare de Villis and the Brevium Exempla must now be regarded in an entirely different light, we are not told how this altered state of affairs has changed the deductions formerly drawn from these sources. There is here a field for much further work, and already Sander in his article *Ueber die Wirtschaftsentwicklung der Karolingerzeit* [1] has tried to show that the discoveries of Dopsch have virtually no effect on the views hitherto held concerning Carolingian economics, as he claims that the Capitulare de Villis is "a typical example of the spirit of the administration of Charlemagne himself," a view with which I cannot agree, among other reasons because Sander does not seem to realise fully the importance of Roman survivals in Southern France.

Among other results of the investigations of Dopsch, mention must be made of the altered interpretation of the monastic chartularies covering donations, which are shown to be abbreviated forms of precaria, or merely records of exchanges, interpretations which tend to disprove the view hitherto held of the predominance of ecclesiastical ownership of land. The "Hufe" is shown to have been of variable size, and an administrative unit, not a measure of area. By a somewhat peculiar course of argumentation the existence of the "Markgenossenschaft" is proved. In the second volume Dopsch adduces a considerable mass of

1 *Schmollers Jahrbuch für Gesetzgebung, Verwaltung,* etc. 37 Jahrgang, 1913, pp. 383–408.

material, together with new interpretations of old material, to prove that the current idea of a purely agricultural civilisation is incorrect. Many points are introduced to show that commerce, industry, and even finance played a considerable *rôle* in the Carolingian age. The great difference of values between the Lex Salica and the Lex Ripuaria is shown to be due, not to a reduction of the wergeld, but rather to a change of values, a sort of price-revolution; arguments for this are supported by passages from every conceivable source, as well as by the results of numismatic finds.

Thus, on the whole, the book represents a new phase of economic history—the re-examination of the sources along the lines of historical source criticism. While undoubtedly many of the statements made by Dopsch will in time be altered, he has paved the way for an entirely new conception of Carolingian economic conditions, and it is greatly to his credit that he is aware of his limitations, and does not attempt to recast the economic part. While the book undoubtedly has its shortcomings, they are those characteristic of the pioneer, and should not detract from its real value. To be sure Dopsch's book cannot be used alone, without that of Inama-Sternegg, as it fails to give a sufficiently definite picture, yet no historian is justified in disregarding the very important discoveries which are here presented.

HILMAR H. WEBER

Finance and Trade under Edward III. By Members of the History School. Edited by G. UNWIN. Manchester: 1918. Price 15*s*. net.

THIS volume deals with the fiscal aspects of Edward III.'s reign. It contains five essays written by students of Manchester University: *The London Lay Subsidy of* 1332 (M. Curtis); *The Societies of the Bardi and the Peruzzi* (E. Russell); *The Taxation of Wool*, 1327–48 (F. R. Barnes); *The Wine Trade with Gascony* (F. Sargeant); and *Calais under Edward III.* (D. Greaves). The editor, Prof. Unwin, contributes an introduction, articles on *Social Evolution in Mediæval London*, and on *London Tradesmen and Their Creditors*, and a detailed study of *The Estate of Merchants*, 1336–65. The book serves to show that Manchester University is alive to the importance of training history graduates to do research in Economic History; and in this respect an example is set to the older universities which is not unneeded.

In his introduction Prof. Unwin combats the view that Edward

III. pursued a "definite economic policy." He considers that the famous statute of 1337 which forbade the exportation of wool and the importation of cloth, and encouraged the settlement of alien weavers, enjoys "an altogether undue prominence in English industrial history." It does not indicate "a far-sighted policy of fostering native industry" (p. 187):—

> Edward was "organising a monopoly in the exportation of wool, which was meant to serve both his fiscal and diplomatic objects; and a temporary prohibition on the exportation was an essential part of the scheme. The prohibition on Flemish cloth and the invitation to Flemish cloth-workers were meant to intensify the diplomatic pressure on Flanders, whilst they might serve to mitigate English objections to restrictions on the exportation of wool" (p. xix).

This interpretation of the Act of 1337 appears to be one-sided. As early as 1331 Edward III., pursuing a policy contemplated by his predecessors for nearly a century, was seeking to introduce alien weavers into this country. His father, at the end of his reign, had definitely planned the settlement of foreign artisans, and his scheme was evidently something more than a "device," for the Flemings and Brabanters hastened to buy up teasels, fuller's earth, and other commodities in order to prevent a native cloth manufacture. Edward II.'s design was interrupted by his death, but his successor resumed it at the first opportunity. In 1331 he gave letters of protection to John Kempe and his servants, and at the same time offered similar letters to all foreign workers of cloth. The Statute of 1337, therefore, only embodied in a parliamentary enactment a policy already set on foot six years before. As a result of the Act numerous letters of safe conduct were issued, an unmistakable proof that the invitation to Flemish cloth workers was seriously meant. Taken in conjunction with earlier manifestations of industrial policy the Act of 1337 can hardly be regarded as nothing but "a fiscal and diplomatic device," although the possibility of turning the Act to fiscal and diplomatic advantage was doubtless not absent from the king's mind.

The policy of plenty with which Edward III. has been credited is considered by Prof. Unwin to be hypothetical. He gives the credit of the "free-trade" enactments of the reign, not to the king, but to Parliament:—

> "The 'free-trade' enactments of Edward III.'s reign were carried in response to urgent petitions of the Commons."

To regard Acts of Parliament as necessarily an "expression of parliamentary opinion" is, however, an assumption hardly more tenable than to regard them as a "sure indication of royal policy,"

which Prof. Unwin rightly deprecates. In the fourteenth century it was a well-known device on the part of the Crown to induce members of Parliament to present petitions praying the king to follow the very line of action favoured by royal policy; and these petitions were promptly turned into statutes on the pretext that they were an "expression of parliamentary opinion." On two occasions, at least, in the reign of Edward III., the Commons made fruitless protests against the practice. It is true that Edward III.'s "free trade" statutes were short-lived, but this was due not to the "administrative and fiscal action of the king," but to the inveterate hostility of London, which always managed to extort from the king a charter nullifying any Act "made" (as they phrased it) "to the hurt of the liberties and customs of the city." It is scarcely credible that fourteenth-century Parliaments, in which the burgher class was so numerously represented, should really have advocated measures throwing open to aliens the internal trade of the country, and thereby undermining the whole basis of monopoly and privilege upon which civic life in the Middle Ages was built up. Stronger evidence is required to prove that mediæval Parliaments were so far ahead of the fundamental principles of mediæval town economy as is implied by this theory.

Certain points of detail call for comment. The computation that the total lay population of London amounted to 16,360 (p. 44) appears to make insufficient allowance for the number of apprentices, journeymen, retainers, and general "hangers-on." The statement (p. 51) that "as in other mediæval cities, the members of the same trade were gathered together in one district" needs qualification. Trade was not localised in *all* mediæval cities. It is misleading to speak of the custom of ½ mark on the sack of wool as "voted by Parliament" (p. 137). It was a *customary*, not a parliamentary tax, although Parliament ratified it in 1275. The increased rate of the subsidy in 1341 is incorrectly given as 20*s*. (p. 163). On p. 210 Prof. Unwin writes: "During the revolution with which the reign opened the foreign staple established in 1312 had been abolished." The foreign staple was in existence before 1312; it was made a compulsory staple in 1313; and was displaced by the home staples in 1326 prior to the "revolution" which brought Edward III. to the throne. It is difficult to agree with the editor's suggestion that the clause in the famous Ordinance of 1353 prohibiting native merchants from exporting wool was supported "by the majority of native traders as a necessary safeguard on the freedom of trade" (p. 232). The reason surely was to compel foreign traders to come and buy

their wool in England, and when the home staples proved a failure owing to the abstention of the foreign merchants the prohibition was withdrawn. If native traders were responsible for the exclusion of native exporters of wool in 1353, we may fairly ask whether they were also responsible for the exclusion of native importers of wine in 1365.

E. LIPSON

The Development of the British West Indies, 1700–1763. By F. W. PITMAN, Ph.D. (Newhaven : Yale University Press. Oxford : University Press. 1917.)

IT is difficult at the present day to realise that there was a time when British trade with the West Indies was of more importance than that with India; and when it might reasonably be contended that Guadeloupe was a more valuable possession than Canada. But even at the time of its zenith there was something unwholesome and artificial about West Indian prosperity, as is made manifest by Dr. Pitman's very learned and valuable volume. The predominance of sugar involved both the decay of the small proprietor and the substitution of slave labour for that of indentured whites. But the existence of large properties encouraged the evils of absenteeism, with the result that a powerful West India interest in London might succeed in bringing about measures that were very far from being beneficial to the Empire as a whole. Dr. Pitman lays stress on the disproportion in area and population between the British Colonies in the temperate and those in the tropical zones as complementary trade areas. Economic equilibrium could only be got by the recognition of the trade between the English Continental Colonies and the French islands. But such recognition was against the economic beliefs of the age; whilst the absentee proprietors set their face even against the extension of the area under sugar in the British islands. There seems ground for the allegation "that the sugar planters in Jamaica found their interest much more in importing small than large quantities of sugar into Great Britain." When a Bill to secure the peopling of Jamaica with white settlers and the cultivation of its lands was introduced into Parliament, the West India interest was strong enough to secure its rejection. The same sinister influence was brought to bear against the retention of Guadeloupe at the time of the Peace of Paris. "Guadeloupe," a contemporary pamphleteer wrote, "one of the greatest acquisitions Britain ever made, acquires many powerful enemies from

private views, and has nothing to plead but her public utility, an advantage often found too feeble an opponent to the private interests of a few." According to Dr. Pitman, "the arguments presented to Pitt in 1760 for the acquisition of Guadeloupe were unanswerable. From the standpoint of the British public it is difficult to understand how Canada could in any sense be regarded as of equal value with the sugar islands." Be this as it may, we must recognise that "the Peace of Paris marked a momentous crisis in the history of the Empire. Through it the planting interest came triumphant. Its position and monopoly were practically undisturbed; Great Britain and America were still exposed to exploitation by an interest whose aims were well understood. . . . The West India planting interest had laid substantial foundations in the nature of economic life for that great discontent which culminated in the American Revolution."

H. E. EGERTON

Trade and Navigation between Spain and the Indies. By C. H. HARING, Ph.D. (Harvard University Press, Cambridge, Mass. 1918.)

IT can safely be asserted that no English-speaking author has ever approached the subject of the Spanish-American trade and navigation of the sixteenth and seventeenth centuries with a more complete knowledge of the original authorities than that possessed by Mr. Haring. His weak point is that he does not allow sufficiently for the ignorance of his readers, and inflicts upon them long passages in Spanish which not one in ten will be able to understand.

It would seem that, at first, the intention was to follow the Portuguese model in making the colonial trade, as far as possible, a Royal monopoly; but the circumstances in Spanish-America were so different as to make such a policy impossible. The Casa de Contratación started under favourable auspices, and in many ways supplied a real want; but "it was unfortunate that the highest administrative posts in so old and worthy an institution as the India House should suffer the blight which attacked all Spanish administrations under the Philips, *i.e.*, the sale and purchase of Government offices." Moreover, its personnel seems to have assumed proportions unwarranted by any corresponding increase in the volume of business transacted.

Mr. Haring has much of interest to say regarding the *averia*,

or contribution to defray the expenses of the convoys, maintained for the defence of the Indian navigation. The rate in 1563–4 was as low as 1 per cent.; but, with the growth of French and, afterwards, English privateering, it tended to increase. In 1596 it had already risen to 7 per cent." In effect, those who obeyed the law were penalised; and the result was that it drove merchants to seek new means of fraud, new avenues of escape from an intolerable situation." The other duties imposed varied greatly from time to time; but the general picture obtained is one of irregularity and uncertainty, caused by the slackness and the venality of the Spanish officials.

Mr. Haring is a little sceptical with regard to the common assertion that the depopulation of Spain under the Hapsburgs was due to the superior attractions of the American continent. Undoubtedly for many years it was difficult to obtain emigrants; and the rule against infidels and heretics remained always a formidable obstacle.

Meanwhile, as was inevitable, the contraband trade greatly flourished. "Under the later Hapsburgs, with the increasing demands of the colonies on the one hand, and the utter ruin of Spanish industries on the other, the dependence of the Seville export commerce upon foreign manufactures was complete. They supplied five-sixths of the cargoes of the outbound fleets." Moreover, the arm of the French was too strong to allow the Spanish Power to enforce its own laws; and the undeveloped region of the Rio de la Plata became the happy hunting ground of the interloper; whilst the presence of the French, the English, and the Dutch in the West Indies must, in any case, have interfered with the Spanish monopoly.

Nor was Spain logical or consistent even in her assertion of monopoly. "Spanish policy towards colonial industries lacked the clearly defined outlines" of the mercantile system. It was merely "opportunist." "As it was, restrictions and prohibitions proved to be of little avail, and the system of great armed fleets and single ports of call in the end a failure."

Even her mineral resources did not in the long run greatly profit Spain. Not being to any extent a producing or manufacturing country, she became merely the distributor of the precious metals to the rest of Europe.

The second part of the volume deals no less thoroughly with the subject of navigation; but limits of space forbid further comment.

H. E. Egerton

Land and Labour in a Deccan Village. By HAROLD H. MANN, D.Sc. (London and Bombay: Oxford University Press. 177 pp.)

THIS volume is an example of a kind of economic study which, it may be hoped, will become increasingly popular in India. In a recent number of the JOURNAL a monograph of the same type on a district in Eastern Bengal was reviewed. The present pamphlet deals on similar lines with a village in the Western Deccan. No greater contrast of agricultural conditions including soil, rainfall, crops, and people could be imagined than is presented by these two cases. Dependence on rain is common to both, but in the one the fall is abundant and the crops secure, in the other it is very capricious, and in many fields winter crops sometimes cannot be sown at all, or, if sown, fail to mature. In both tillage does not require the toil necessary in irrigated tracts, and, once his crops are sown and started, the farmer can turn his attention to other means of livelihood.

An interesting feature is that both inquiries were conducted by Indians, guided in the one case by an English Civil Servant, and in the other by Mr. Mann, Principal of the Poona Agricultural College. There is no doubt a tendency in the Hindu mind to spend its energies on vague speculation rather than on the investigation of concrete facts, and it must be admitted that our educational schemes have often failed to direct the steps of Indian students into more fruitful paths. But the young men who collaborated in the economic survey of Pimpla Saudagar present their facts exactly as they found them, and show an almost exaggerated reluctance to discuss remedies. The necessity of employing men attached to the Poona College involved the selection of a village near Poona and Kirkee. Pimpla, however typical as regards soil, etc., of the agricultural conditions of the Western Deccan, must have had its economic life greatly affected by the opportunity of earning money in ways wholly unconnected with farming. The figures given on pages 114 and 137 show that the income from land is less than that obtained from other sources.

Pimpla Saudagar has an area of 1,065 acres and a population of 556 distributed among 111 families, or only five persons per family. Unfortunately the growth of population has not been traced with the help of the Census returns. It is, therefore, impossible to say whether pressure on the soil is increasing. It seems hardly likely that this is the case in view of the increase of opportunities of earning money outside the village. The

number of children is so small that the authors are probably right in thinking that the population has reached a stationary condition. It would have been interesting to know whether the birthrate is low, or whether, as is usual in India, the effect of a high birthrate is nullified by great mortality among infants. The table of crops on page 67 would be much more useful if figures had been excerpted for quinquennial periods. Unless this is done the making of deductions is very hazardous in the case of insecure unirrigated tracts, where harvests vary enormously with the seasons. To give a single example, 285 acres were sown with wheat and grain in 1905–06, and 42 in 1913–14. Information as to the rents paid for different classes of land should have been given.

To-day the chief matters of economic interest in rural India are the possibility of increasing production, the extent of morcellement, debt, and land transfer, and the means of combating these evils. The authors evidently think the character of the farming in Pimpla is declining and notice the drop in the wheat area. Morcellement, with the resulting numerous petty holdings consisting of small scattered fields, is unfavourable to any cereal requiring careful tillage. The guess may be hazarded that the diversion of energy to wage-earning outside the village may have the same effect. The worst features of the farming are the use of poor seed and failure to apply simple cures to pests. With Poona College in the neighbourhood the people have remedies within their reach.

Morcellement has received careful study. One cannot help thinking, however, that there is some flaw in the deductions drawn from the statistics of selected years, beginning with 1771, when there were 19 holdings averaging 40 acres each, and ending with 1914, when there were 100 or more, half of which appear to be under five acres. It seems pretty clear that the earlier holdings were to a far larger extent than the later ones joint family holdings. The tendency is to break these up into individual holdings. A favourite way of effecting this is to split up individual fields with the result that each shareholder receives small plots scattered over the village area. In Pimpla 65 per cent. of the fields are less than one and 22 per cent. less than half an acre. The remedy of restripement, which has been adopted in some parts of Europe, has not penetrated to India. The revenue law makes elaborate provisions for partition, but none for consolidation.

The amount of the debts owed by 103 out of 111 resident families is stated. The figures are robbed of much of their signi-

ficance because the authors thought it was impossible to ascertain the history of the growth of debt. Why this should be the case is not apparent. The total is not very large, but the burden is heavy because of the high rate of interest, which averages 14 per cent. in the case of debts secured on land, and 24 per cent. when advances are made on personal security. The mortgaged area is not large, but part of it is hypothecated under the ruinous system of conditional sale. In some parts of India drastic restrictions have been put on transfers of agricultural land. In the Punjab, where they have been longest in force, none of the economic evils which were predicted have made their appearance.

The circumstances of 103 out of 111 resident families seem to have been examined. Their income, mainly derived from wages, worked out at Rs.218 per family, and the same sum is estimated as the amount necessary to maintain a family in decent comfort. This is equivalent to Rs.44 per head per annum, or, say, two pence per diem. The wage rate for work outside the village is put at sixpence per diem. On these figures there is no surplus for paying interest on loans. From an examination of the case family by family the disheartening conclusion is drawn that, while 25 persons have an average income of Rs.77 per head and 137 persons one of Rs.62, the remaining 352 are insolvent, having only an average income of Rs.32, which is much below the sum required for food and clothing, let alone payment of interest on debt. One would like to know whether the families concerned showed any signs of physical deterioration as the result of the abject poverty in which they are supposed to live. If not, in the absence of proof of a rapid increase of debt, one is inclined to suspect some flaw in the calculations. The experience of officers who assess land revenue in India shows that it is exceedingly difficult to ascertain the income derived from land. Where kind rents prevail the estimates are in the case of insecure dry tracts especially unreliable. To base the estimate on the crop returns of a single year, as the authors seem to have done, is fatal. The average crop areas of 10, or, still better, 15 years should be taken. Even when trustworthy areas are obtained, the estimates of crop yields per acre are largely hypothetical, and there is much difficulty in determining fair average prices. The figures on pages 114 and 137 are based on the exceptionally low area of the year 1915–16, which was possibly 20 per cent. under a true average. In any case, as over 60 per cent. of the income was derived from sources other than the land, the root of the trouble may really be insufficient industrial wages.

It is to be hoped that the Poona College will make similar surveys of some purely agricultural villages, and deal later with a whole subdivision of the Poona district. The district gazetteers describe more or less fully the economic conditions of rural tracts. But the information which they contain requires to be supplemented by special surveys, and in carrying them out the agricultural colleges can fulfil a very useful *rôle*.

J. M. DOUIE

Do You Pay Excess Profits Duty? By T. FRAME MILLER, F.C.A. (London: A. W. Shaw and Co. 1918. Pp. 34. Price 1*s*. net.)

THIS pamphlet consists of articles reprinted from the magazine, *System*, and gives a clear exposition of the working of the Finance Acts governing the Excess Profits Duty. The relative portions of these Acts are quoted in an appendix, and a number of detailed examples are given to show the working of the regulations. It probably would require a panel of surveyors of taxes to sit in judgment on these cases, but so far as can be seen they are very fairly chosen. With unusual praise of parliamentary effort the author says: " After some experience of the working of the Act it has been amended so as to meet, as far as human ingenuity can, every case of hardship."

The sting of the pamphlet is, however, in the preface, where the present system of levy is denounced as one " which offers a premium to wasteful administration and inefficiency." Had Mr. Bonar Law, says the author, " increased the duty to 100 per cent. of all excess profits and given business people a substantial rebate in all excess profits attributable to economies effected in administration and manufacture, he would have so stimulated the adoption in this country of scientific methods of production and factory costing that we should have been in a much better position, in this respect, to face competition when the war is over than we were in the early days of 1914." Mr. Miller, in the second paragraph of his pamphlet, indicates the need for " liquid capital at command " to enable business men to face the post-war position. They are now sure of 20 per cent. of their excess profits towards this fund and if they can achieve economies in production they also retain 20 per cent. of the resultant profit. Of this they are certain, but Mr. Miller would make them first surrender all their excess profits and then accumulate their fighting fund from a " substantial rebate " on profits due to economies. The outlook

would not appear attractive at a time when all costs were going up by leaps and bounds, and when in the end genuine economies might still be swamped in extra costs beyond all hope of proving their existence. Take the case analysed on pages 20–21, where the excess profits are assessed at £7,590 of which £1,518 falls to the firm; if they get the same sum as the result of economies on Mr. Miller's plan, it would mean that even if all the economies were freed from duty the trade expenses of £11,500 were 12 per cent. below the pre-war level. It looks too much of a gamble to expect such a reduction with rising costs.

What is true in Mr. Miller's criticism is that careless manufacturers or merchants faced by an increased charge may say: "What does it matter? The Government would take 80 per cent. of the profit anyway." To this there is no answer except to commend to such "business men" an old adage about taking care of the pence. After all, with a flat rate of tax one does not lose by having a high taxable income.

HENRY W. MACROSTY

La Disfatta del Socialismo, by AGOSTINO LANZILLO. (Libreria della Voce, Firenze, 1918.)

THE author is a syndicalist of the School of Sorel. In his view the economic Kingdom of Heaven must suffer violence and the violent must take it by force. He is at the same time an ardent patriot, and as an economist a free trader. In his view the bankruptcy of Capitalism became inevitable when it gave up the full gospel of classical political economy and accepted protection and State interference, while Socialism signed its own death warrant when it consented to pursue its aims by constitutional means, and so became a political party like any other. Failure to remodel the social structure by revolution, and the fact that Prussianism, intent on world power, bought the support of the German Socialists by the offer of infinite industrial prosperity, made the war inevitable. A new Society, differing profoundly from the old in moral ideals and political and economic constitution, will emerge. A warlike and energetic type of character has been evolved, and nationalism has killed internationalism as a force to be reckoned with. Government will continue to be based on popular will, but parliamentary democracy has shown its impotence to produce men of action capable either of conducting the war or of dealing with the urgent problems of the future, when policy must be based, not on foolish

dreams of universal peace, but on the certainty of a German war of revenge. No sudden and complete change in the social structure is to be expected. But the failure of Socialism has cleared the way for Syndicalism, which inherits all that is vital in its doctrines. The organisation of the industrial and agricultural workers in syndicates will enable them to take full advantage of circumstances, whether the future development is in the direction of State Socialism or of freedom of trade and competition. It will be the duty of the syndicates to boycott parliament, and reduce it to impotence. The author's ideal involves the placing of power in the hands of a small body of strong men. The mass of the proletariat is lacking in the intelligence and courage requisite for the task of government, and is destined to be "raw material in the hands of those who know, understand, see, and will."

J. M. Douie

NOTES AND MEMORANDA

The Rice Industry of Japan.

Rice is the staple crop of Japanese agriculture. It is the national food of the people of Japan, and is widely cultivated throughout the length and breadth of the country. Without rice Japanese agriculture can hardly be said to exist. The crop returns of rice are eagerly studied by the financiers of the grain market, for its price regulates the prices of all the other necessaries of life. The rice market is very sensitive to weather conditions, especially at the ripening season. Storms often upset the financial market, while dry weather is the source of economic disturbances in the rural communities. The paddy fields are watered from rivers and irrigation canals, and are protected against inundation and floods by means of embankments and sluice gates. Hydraulic engineering also plays no small part in the success of rice culture. Agriculturists are making their best efforts to increase the average yield of the paddy fields. Experiments are constantly being made from the agricultural as well as chemical standpoint to determine what varieties are best and give the largest yield. The principles of the new genetic science are being applied to rice culture, experiments especially in the search for early varieties suitable to northern Japan. The increase of yield, however, has not kept pace with the increase of population. But imports from Indo-China and elsewhere make up the national deficiency. In good years the price falls so low that the country feels a kind of agricultural depression such as is felt at times in England and other countries. At such times adjusting the price of rice becomes an important agrarian question. Rice granaries are in demand in the rural districts in which to store the surplus rice until the price goes up. Agricultural banks advance money to these granaries in order to aid the producers. Rice culture, nevertheless, is always on a small scale and farmers are never well off. However, most of them find it difficult to subsist on other di[illegible]l rice. Hence, ever since the foundation of the Empire 2,600 years ago, rice

culture has been handed down from generation to generation as the most important agricultural occupation of the country. The future welfare and strength of Japan, not to speak of advancement in civilisation, depend much upon how the question of rice culture is solved. If the present system continues the rural population will never get beyond the horizon of a small-scale rice culture and a poor standard of living.

Rice was the chief agricultural product at the beginning of Japanese authentic history. History leaves us no account of the people being engaged in any other occupation than that of agriculture. The ancestors of the Japanese people must have already passed the nomadic stage of life before they settled in their adopted island country. The economic life of the people began with the cultivation of rice. When the paddy fields yielded abundant crops of rice, the founders of the Empire were pleased to call the country " the land of full crops," a land where their descendants could multiply and dominate. From such traditional facts it may be inferred that the original home of the Japanese people was somewhere in the southern islands of Asia, not in the highlands of the Continent, where the subsistence of the people was derived from stock-raising as with the present Mongolian Tartars. Rice has been thus the historical national food of the people of Japan since time immemorial.

The periodical partition of land and the common cultivation of the royal demesne seem to have been practised in the early days of Japanese history. The size of such allotted land was just sufficient to yield enough rice to sustain its cultivator. Each man and woman, being of age, was entitled to half an acre of land, which averaged twenty bushels of rice per acre even during the primitive stages of agriculture. The rice of the demesne was stored in the government granaries and made good use of during odd years. It was the established policy of the government to provide reservoirs and canals for the irrigation of paddy fields. Wherever water-courses could be secured rice culture has found its way, and the rural population accordingly increased and prospered.

Rice was originally a tropical plant and gradually became acclimatised to the soil of Japan. Even now the late varieties, though they are the largest producers, cannot be safely depended upon in the north-eastern sections of the country. The early varieties are the only kinds that can be grown in the island of Hokkaido. It was a slow process of evolution which acclimatised a tropical plant even in the extreme north of Japan. It was the work of

centuries. It was necessitated by the growth of population and by the frequent occurrences of famine. The extension of its culture is still going on. To make the nation self-supplying and independent in this important national food the paddy fields must be increased in area and in yield. The following statistical table shows the recent increase in area and yield of paddy fields :—

	Area 1,000 cho.[1]	Production 1,000 koku.[2]	production per tan.[3]
1912 ...	3,003	50,222	1,672 koku.
1913 ...	3,029	50,255	1,659 „
1914 ...	3,033	57,006	1,879 „
1915 ...	3,056	55,914	1,830 „

The market for rice is chiefly domestic, as it is produced for domestic consumption. Formerly it was transported by means of river and coastwise navigation. Railroads having been constructed for internal traffic the course of transportation has undergone many changes. Besides the two central markets, namely Tokyo and Osaka, there are many important provincial markets, such as Nagoya and Kuwana, where Produce Exchanges have been established. In recent years the quality of rice has been considerably improved. Hence provinces which had only local markets for their rice can now send it to Tokyo and find a market there. The earliest varieties appear in the market even as early as August. They are grown in a place called Nigo-Han, near Tokyo. But the latest varieties are of the best quality and command the highest prices. It has been the aim of agriculturists throughout the country to improve the quality of rice as well as the manner of packing in straw bags for transportation. Considerable improvement has been achieved in that respect, especially in the provinces of Kumamoto, Oida, and Yamaguchoi. The result is saving in handling and transportation and gain in commanding a good price in the markets.

Rice growers usually use barley or naked barley as a diet and sell their produce of rice in the markets. This is also the case with silk raisers. They sell the silk and buy cotton for their own use.

The annual production of rice is over 250,000,000 bushels, and if we estimate it as averaging yen three per bushel the whole value would be yen 750,000,000. No other industry can compare with the rice industry in importance in the national economy. When such a vast quantity of rice begins to appear in the markets in the fall, throughout the country, it can be easily imagined that business is very brisk. Bankers and merchants have a share of

[1] 1 cho is about 2½ acres. [2] 1 koku = 5 bushels. [3] 1 tan = ¼ acre

the business. If, however, the crop is short business becomes dull and everyone feels a kind of agricultural depression. This single crop seems to be the mainspring of the national economic activity. Its importance to the welfare of the people of Japan cannot be overestimated.

The cultivation of rice is not poetical nor fancy work, but a work of real drudgery. Japanese farmers are born to rice-growing. The paddy fields seem to them a paradise. Their homes are surrounded by them. They look after the water morning and evening during the growing season and do not mind the heat of the summer sun when weeding. They are, however, afraid of storms at the time of flowering, and of the 210th day of the lunar calendar. When crops are ripe and ready to harvest men and women are kept busy with the sickles. The rice plants bend with the heavy grain and the paddy fields look as if loaded with precious gold. The rural folks are then active in the fields and are as merry as at the time of transplanting. Drying, threshing, and hulling involves much hard work, while no labour was spared in securing a good yield. Vigilance is required in looking after enemies, especially insects and borers. Idlers cannot succeed in the growing of rice. Inherited experience enables Japanese farmers to become expert rice growers. They are happier working in paddy fields than on the upland farms. For that reason the culture of rice is gradually extended even to the northern provinces. The island of Hokkaido is rapidly becoming a rich rice-growing country. Thirty years ago rice was grown only in limited localities in the southern part of Hokkaido. Not a bushel was produced in the vicinity of Sapporo at that time.

Now about 4,000,000 bushels are grown annually in Hokkaido. Within thirty years the yield may be increased five times—to 20,000,000 bushels—inasmuch as the paddy fields can be increased without much difficulty to about five times the present area. If the experiments in scientific rice-breeding succeed in producing earlier varieties of rice, then the culture of rice may still be extended to those provinces in Hokkaido where climate has hitherto been considered too severe for its growth. The acclimatisation of rice, though a slow process, is a possibility; if so, it will make possible the replacing of the earliest varieties by still earlier and new varieties. There are three kinds of rice—ordinary, glutinous, and upland. The most important of the three is the ordinary rice, which may be divided into three varieties, namely early, medium, and late. Each of these varieties has about ten chief sub-varieties and are the most commonly cultivated. One

variety differs from another in the length of the straw, number of shoots, the length of ears, the number of grains in the ear, size and form of grains, time of ripening, and other peculiarities. So long as rice forms the chief national food and plays an important part in the economy of the nation, it is very desirable to produce the best early varieties and to extend rice culture to all parts of Hokkaido and even to Saghalien.

Rice culture may be said to form the backbone of Japanese agriculture. The paddy fields constitute more than one-half of the arable land of the country. The Mulberry and Tea farms produce two important articles of export, but the value of tea and silk cannot be compared with the importance of rice. If cotton merits the name of "King" in America, rice is certainly entitled to be called "Queen" in Japan. The following table shows the increase of area of the paddy fields during nearly forty years :—

Average area of paddy fields from	1878 to 1887	2,579,060 cho.
" "	1888 " 1897	2,754,289 "
" "	1898 " 1907	2,861,158 "
" "	1908 " 1914	2,978,576 "

These statistics show that the area increase of paddy fields from 1878 to 1914 was 399,516 cho (1 cho being about 2½ acres); that is, the increase averaged 11,103 cho per year. From this fact we infer that, Japan being pressed by the growth of population, the lands available for rice culture are used as paddy fields. This increase in area is not at the expense of the upland farms because the total area of the latter also shows some increase. Hence we conclude that arable lands are constantly being reclaimed from new lands and that the margin of cultivation is extended to inferior soil. The result is an increased production of rice, as may be seen from the following statistics :—

Average yield of rice from	1878 to 1887	31,809,467 koku.
" "	1888 " 1897	38,236,831 "
" "	1898 " 1907	44,382,972 "
" "	1908 " 1914	51,457,321 "

This shows that the increased production of rice amounted to 19,647,854 koku (1 koku = 5 bushels) in thirty-six years. The average increase per year is 545,773 koku, which is about the amount needed for the increase of population. How long we can continue to increase the production of rice at such a ratio is a question of vital importance to the welfare of the nation.

The consumption of rice per capita is increasing constantly, as the following statistics show. The statistics are based on the assumption that the rice consumed is the amount of production

of the previous year plus or minus the amount of rice imported or exported as the case may be.

Average consumption per capita from	1888 to 1897	.946 koku.
,, ,,	1898 ,, 1907	.984 ,,
,, ,,	1908 ,, 1912	1.042 ,,

Rice is used, besides being consumed as food, in the form of rice flour for confectionery, for distilling *sake*, and for starch. The standard of living being constantly raised the consumption of rice will far exceed one koku per capita. It is therefore necessary to increase the yield of rice per tan by means of intensive culture. The following statistics show that the yield of rice per tan has been raised within the last twenty years.

Average yield per tan from	1888 to 1897	1.401 koku.
,, ,,	1898 ,, 1907	1.571 ,,
,, ,,	1908 ,, 1912	1.734 ,,

If we take the three years 1912, 1913, 1914, the average comes up to 1.771 koku per tan (tan $=\frac{1}{4}$ acre), so that the yield per acre is over 35 bushels. It will not take many years to bring the average yield up to 40 bushels per acre. The four prefectures, Kyoto, Osaka, Nara, Wakayama, returned in the year 1914 49 bushels as the average yield per acre.

The price of rice is, of course, regulated by the law of supply and demand, but it constantly fluctuates in the market, depending chiefly on the condition of the crops. The Produce Exchanges find it very difficult to fix the normal price of rice during the ripening season when the facts of temperature and humidity are still uncertain. The fluctuation of the price of rice often causes anxiety to the people, inasmuch as rice is their main food, and because it also fixes the standard price of other necessaries of life, as well as the wages of the working classes. The rice imported from British India, Siam, French Indo-China and other countries in Asia tends to moderate prices, as it is cheaper, being of an inferior quality. Within three years, from 1912 to 1914, the rice imported from these sources averaged 2,631,450 koku per year, and amounted to yen 34,996,578. We also get a supply of rice from Formosa and Korea which helps to steady the rice market. In Formosa they get two crops of rice per year, but its quality is rather poor. In Korea rice culture is dependent chiefly upon rainfall for irrigation, but it is of better quality and commands a higher price than rice grown in Formosa. From the year 1912 to 1914 inclusive the rice imported from Formosa averaged 820,028 koku per year, valued at yen 10,953,215, an average of yen 13·28 per koku. From Korea we imported rice during the same period which averaged 624,629 koku per year,

valued at yen 9,582,674, or yen 15·71 per koku. Thus it will be seen that within three years, from 1912 to 1914 inclusive, the rice imported from the Asiatic countries, Formosa and Korea, averaged over 4,000,000 koku, with a value of more than yen 55,530,000 per year. This cheaper rice supplied food to the poorer classes and supplemented the deficiency in quantity of the native rice. Without this importation the prices of commodities other than rice would become higher, such as barley, beans, and other necessities made out of such grains, such as *mise* and sauce, and would much affect the domestic economy of the wage-earning classes. If this imported rice, 4,076,097 koku, be added to the average quantity of rice produced, it would make a total of 56,570,758 koku. This amount would represent the average quantity of rice consumed during the period under consideration, provided no rice is exported. Though the native rice commands a higher price, some of it is exported to other countries chiefly for the consumption of Japanese living there. During the period under consideration the rice exported averaged 272,121 koku per year at at value of yen 5,627,997. This shows that the quantity of the export was about 7 per cent., while the value was about 10 per cent. of the import. When the price of rice rises it can be steadied by the importation of foreign rice, but when it gets so low as to cause loss to the producers it is very difficult to bring the price up again to a normal standard, because there is not sufficient market abroad for Japanese rice. Elasticity and adjustment of the price of rice seem to be one-sided. Hence at the last meeting of the Agricultural Committee for the Adjustment of the Price of Rice in Tokyo the establishment of rice granaries in different prefectures was recommended as the only effective method of keeping up the price to a normal standard. But the most natural and the most economical way of adjusting the price, whether high or low, must be to open world markets to Japanese rice. The following table shows the price of rice per koku per decade since the Restoration :—

From 1868 to 1877	Yen 6.36	From 1898 to 1907	Yen 13.33
„ 1878 „ 1887	„ 7.40	„ 1908 „ 1912	„ 16.72
„ 1888 „ 1897	„ 8.09		

During these forty-five years the minimum price was yen 3·88 per koku, in 1872, and the maximum price was yen 20·72 per koku, in 1912.

Can the cultivation of paddy fields be organised as a business? They are now simply employment fields, that is, farmers employ their time and get a wage-income, but nothing more. Cannot culture on a large scale be introduced? The extreme small-scale

culture or spade farming is still the chief method of rice culture. How can improvement be introduced into this national industry so as to elevate it as a business? Prosperous rural economy depends much upon the solution of such a vital problem. According to recent statistics the total number of farming families was 5,453,969 in the year 1915, while the total area of paddy fields was given as 2,965,566 cho. The average area per family is a little over 0·5 cho. The total area of upland farms is given as 2,893,760 cho, so that the average area per family is also a little over 0·5 cho. Both being added together it will make a little over one cho per family. One cho of arable land, which is equivalent to about two acres and a half, is not sufficient to make farming a prosperous business. Consequently the farmers are farm labourers who employ their time on their own or tenanted land in order to earn wages, but they obtain no profits on other business undertakings. This wage-income is not enough to support farmers' families. Therefore subsidiary occupations are necessary in order to eke out an existence; but, as in France, as there are not many profitable industries in rural districts where they can employ their surplus time, the farmers migrate from the rural communities to the cities and industrial centres. This is a vital national problem, which must not be overlooked. This rural exodus is, however, not a thing entirely to be regretted in Japan. It may give a much-needed stimulus to the reorganisation of the rural communities and the improvement of agriculture. It is hardly possible that this rural exodus will be carried to such an extent as to leave arable lands uncultivated or villages deserted. On the contrary, we can maintain the productivity of the soil, or even make it more productive, by reorganising agriculture, even though there may be some exodus of the rural population to the urban districts. How we shall accomplish this reorganisation is a grave question which the people must seriously consider.

I have shown above that the average area cultivated by one farmer family is a little over one cho, but a great majority of farmers cultivate considerably less than one cho. In the year 1915 the following statistics were given by the government authorities:—

Area cultivated per farmer family,	under	0.5 cho	1,990,275	families,	36.64%
,, ,,	over	0.5 ,,	1,823,895	,,	33.35%
,, ,,	,,	1.0 ,,	1,092,157	,,	19.95%
,, ,,	,,	2.0 ,,	330,121	,,	6.10%
,, ,,	,,	3.0 ,,	149,367	,,	2.74%
,, ,,	,,	5.0 ,,	68,154	,,	1.22%
	Total	...	5,453,969		100.00%

Thus 70 per cent. of the farmers cultivate an area less than one cho. No rice industry, however intensively it may be carried on, can flourish on such a small patch of ground. Hence the reorganisation of agriculture in Japan so as to increase the area of arable lands is most urgent. This can be done by turning some portions of the forest lands into arable lands. The extent of the forest lands is three times as large as the arable lands. In 1915 the total area of all kinds of forests, namely, Crown, State, Communal, Temple, and private forests, was given as 18,640,873 cho. Perhaps on account of the difficulty of irrigation the newly reclaimed lands cannot be turned into paddy fields. If so, we could here grow upland rice, or, more profitable still, raise stock, whether horned cattle, sheep, or pigs. The income from these sources will greatly supplement that from the original paddy fields on upland farms. Moreover, manures are a great asset to the farmers, as they enable them to keep up the fertility of the soil. The introduction of stock will naturally lead to the cultivation of grasses and root crops, and hence more work-horses, with ploughs, harrows, cultivators, and other tools will come into use. The rice industry accompanied by the raising of a small amount of stock will greatly ameliorate the condition of the farmers. Sericulture, hitherto known as the great subsidiary occupation, and stock-raising, the new subsidiary occupation, both being united in an organisation, will make the rice industry a profitable business, and the farmer's life endurable and even happy.

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AN ANALYSIS OF THE INCREASED COST OF CLOTHING MATERIALS DURING THE PERIOD JULY, 1914, TO OCTOBER, 1918.

IT is a noteworthy fact that during the period July, 1914, to October, 1918, the cost of clothing and clothing materials has increased at least by 290 per cent., whereas the increase in foodstuffs generally has been stated at 129 per cent.

Of the main items constituting the family budget of an artisan, clothing and clothing materials have risen more than proportionately to the other items. In view of the fact of the general accusation of profiteering, there would appear to be a *primâ facie* charge against clothing manufacturers and retailers. It is difficult, however, to substantiate such a charge owing to the lack of

sufficient evidence as regards retail prices of clothing and clothing materials of a standardised quality.

In spite of the lack of retail price quotations, it has been possible to trace the cost of each process with respect to woollen and cotton goods up to the point of manufacture.

In discussing the problem it is necessary to keep in mind the fact that the rapid rise in general prices is due in part to monetary causes and to fundamental economic changes. It is not the purpose of this article to deal with these two causes; what is aimed at is to measure the increases in the costs of various processes, by means of index numbers based on actual market prices. On the basis of these numbers "theoretical" or "expected" increases in costs have been calculated and these "expected" increases are later compared with the actual prices extant in October, 1918. The raw materials and semi-manufactured products under consideration are "standard" throughout the period.

It is necessary to point out that with regard to prices in the wool textile industry, such prices are "worsted," the reason for this being that the woollen manufacturer is usually a "composite unit," *i.e.*, he takes the raw material and turns out the finished article. The worsted trade represents the other extreme of industrial organisation, specialisation of processes being very pronounced. In worsted manufacturing the following distinct processes are well marked:—

1. Wool merchanting.
2. Top making and combing.
3. Yarn spinning.
4. Manufacturing.
5. Dyeing and finishing.

As a consequence of this specialisation in processes the cost of the manufacture of a worsted cloth can be traced from stage to stage.

It is possible to obtain prices for standard qualities of wool, tops, and yarns at any time. The index numbers of the average four-monthly prices are detailed below.

Turning to cotton, the index numbers for raw cotton, cotton yarns, and cotton piece goods have been based on market prices as quoted in the *Manchester Guardian*. It has been possible to get a stage further in the investigation of cotton prices than in worsted prices.

In Table I., "Index Numbers of English Wools," the net increase on July, 1914, prices is 117 per cent. Three types of English wools are given, but it was found on a further inquiry

embracing thirteen types that the index number was hardly affected at all.

With regard to Colonial and British tops, there is a net increase during the period of 142 per cent. This clearly does not lead to the assumption that any appreciable element of profiteering has taken place in wool combing and top making, especially when the increases in wages and standing charges, 80 per cent. and 10 per cent. respectively, are taken into consideration. In comparison, however, the index numbers for worsted yarns show a remarkable difference. There is an increase in the period of 295 per cent. If the charge of profiteering is to be justified, it is here.

Assuming that tops and other material have advanced by equal amounts, 140 per cent., and that raw materials account for 75 per cent. of the cost of production, that wages account for 12·5 per cent. and have advanced by 80 per cent., and that standing charges accounting for 12·5 per cent. have advanced by 10 per cent., we get the following expected increase in the price of yarn :—

$$\frac{(140 \times 6) + (80 \times 1) + (10 \times 1)}{8} = 116\ \%.$$

On the assumption that one-sixth of the machinery be idle, the standing charges would have to be increased by approximately 20 per cent. Consequently the final expected increase would not exceed 139 per cent. The difference between the actual increase of 295 per cent. and the "expected" increase of 139 per cent. evidently requires some explanation to justify it. There is no doubt that spinners have availed themselves of every opportunity for demanding maximum prices. In the same manner it is possible to arrive at an "expected" increase in the price of cloth. Assuming the proportionate value of yarn in the cost of production as 60 per cent., and the price of yarn increased by 295 per cent., labour, which accounts for about 20 per cent. of the cost of production, has increased by 80 per cent., while standing charges, which have increased by 15 per cent., account for 20 per cent. of the cost of production, we arrive at the following expected increase in the price of cloth :—

$$\frac{(295 \times 6) + (80 \times 2) + (10 \times 2)}{10} = 195\cdot 0\ \%.$$

Taking the machinery idle as about one-fourth and the standing charges to be increased accordingly, we get an expected increase of 227 per cent., which would make a July, 1914, cloth at 5s. now cost 16s. 4d.

Cotton.

On the whole there is a great deal of similarity between cotton and wool textile prices. Just as in wool prices, the indictment of profiteering would appear to be most supportable in the case of the spinner.

Percentage Increases on July, 1914, *Prices.*

	Jan., 1915.	July, 1915.	Jan., 1916.	July, 1916.	Jan., 1917.	July, 1917.	Jan., 1918.	July, 1918.	Oct., 1918.
Wool ...	17	50	59	58	80	106	117	117	117
J Wool	13	3	21	41	115	139	139	139	139
Tops ...	13	51	65	63	109	106	127	142	142
Yarns ...	9	62	76	92	131	166	228	241	295
Raw Cotton	31	21	17	20	77	200	245	220	256
Cotton Yarns	26	14	25	29	80	154	270	311	421
Cotton Cloths	18	14	13	17	51	100	214	254	343

The most striking feature of the above table is the difference of the percentage increase between the raw material and the yarn.

Wool	117	178 %	Cotton	256	165 %
Yarn	295		Cotton Yarns ...	421	

In spite of the fact that cotton yarns have increased by 421 per cent., whereas worsted yarns have risen by 295 per cent., the relative increase from raw material to yarns is greater in the case of worsted than cotton.

The most noticeable feature, however, is the fact that the finished article, cotton cloth, has actually increased less in price than the yarn: 343 per cent. as against 421 per cent. Finally, it would appear that the rapid increase in the price of clothing and clothing materials is hardly legitimate, and that, in the main, a considerable element of profiteering is to be found, particularly in the intermediate stage of manufacture (spinning).

TABLE I.—*Index Numbers of English Wools.*
July, 1914, *Price*=100.

	July, 1914.	Nov., 1914.	July, 1915.	Nov., 1915.	July, 1916.	Nov., 1916.	July, 1917.	Nov., 1917.	July, 1918.	Oct., 1918.
Lincoln Hogs ...	100	117	154	154	162	171	208	208	213	213
South Down Ewes	100	114	146	149	149	162	203	203	219	219
Best Scotch Cross-bred Hogs ...	100	120	150	155	164	173	209	209	218	218
English Wools average	100	117	150	153	158	169	206	206	217	217

TABLE II.—*Index Numbers of Tops, Worsted Yarns, Raw Cotton, Cotton Cloths. July*, 1914, *Price*=100.

	July, 1914.	Nov., 1914.	July, 1915.	Nov., 1915.	July, 1916.	Nov., 1916.	July, 1917.	Nov., 1917.	July, 1918.	Oct. 1918.
Colonial & British tops	100	115	151	139	163	196	206	206	242	242
Worsted yarns ...	100	105	162	157	192	218	266	304	373	395
Raw cotton... ...	100	72	79	100	120	171	300	334	324	356
Cotton cloths ...	100	—	86	98	117	141	200	255	354	443

TABLE III.—*Index Numbers of Cotton Yarns.**
July, 1914, *Price*=100.

	July, 1914.	July, 1915.	Nov., 1915.	July, 1916.	Nov., 1916.	July, 1917.	Nov., 1917.	July, 1918.	Oct., 1918.
32s Cap Twist ...	100	84	104	125	161	239	296	489	548
60s Egyptian ...	100	82	101	131	198	249	274	384	445
20s Water Bundle	100	94	109	134	165	264	316	491	554
16s Weft	100	84	107	128	161	262	313	497	539
All Yarn	100	86	105	129	171	254	300	465	521

* Extracted from the *Manchester Guardian.*

A. S. FIRTH

OFFICIAL PAPERS.

Report of the Committee on Currency.

THE Committee appointed last January to consider the problems which will arise in connection with currency and the foreign exchanges after the war have presented a first interim report [Cd. 9182.] Lord Cunliffe is the Chairman of the Committee, and the other members, all of whom sign the report, are :—

Sir Charles Addis, Hong-kong and Shanghai Banking Corporation; the Hon. Rupert Beckett, Beckett and Co.; Sir John Bradbury, K.C.B., Secretary to the Treasury; Mr. G. C. Cassels, Bank of Montreal; Mr. Gaspard Farrer, Baring and Co.; the Hon. Herbert Gibbs, Antony Gibbs and Sons; Mr. W. H. N. Goschen, chairman of the Clearing Bankers' Committee; Lord Inchcape; Mr. R. W. Jeans, Bank of Australasia; Professor A. C. Pigou, Cambridge University; Mr. G. F. Stewart, F.S.I., ex-Governor of the Bank of Ireland; and Mr. William Wallace, Royal Bank of Scotland.

The main conclusions of the Committee are summarised as follows :—

Before the war the country possessed a complete and effective gold standard. The provisions of the Bank Act, 1844, operated automatically to correct unfavourable exchanges and to check undue expansions of credit.

During the war the conditions necessary to the maintenance of that standard have ceased to exist. The main cause has been the growth of credit due to Government borrowing from the Bank of England and other banks for war needs. The unlimited issue of currency notes has been both an inevitable consequence and a necessary condition of this growth of credit.

In our opinion it is imperative that after the war the conditions necessary to the maintenance of an effective gold standard should be restored without delay. Unless the machinery which long experience has shown to be the only effective remedy for an adverse balance of trade and an undue growth of credit is once more brought into play, there will be grave danger of a progressive credit expansion which will result in a foreign drain of gold menacing the convertibility of our note issue and so jeopardising the international trade position of the country.

The pre-requisites for the restoration of an effective gold standard are :—

(*a*) The cessation of Government borrowing as soon as possible after the war. We recommend that at the earliest possible moment an adequate sinking fund should be provided out of revenue, so that there may be a regular annual reduction of capital liabilities, more especially those which constitute the floating debt.

(*b*) The recognised machinery, namely, the raising and making effective of the Bank of England discount rate, which before the war operated to check a foreign drain of gold and the speculative expansion of credit in this country, must be kept in working order. This necessity cannot, and should not, be evaded by any attempt to continue differential rates for home and foreign money after the war.

(*c*) The issue of fiduciary notes should, as soon as practicable, once more be limited by law, and the present arrangements under which deposits at the Bank of England may be exchanged for legal tender currency without affecting the reserve of the banking department should be terminated at the earliest possible moment. Subject to transitional arrangements as regards currency notes and to any special arrangements in regard to Scotland and Ireland which we may have to propose when we come to deal with the questions affecting those parts of the United Kingdom, we recommend that the note issue (except as regards existing private issues) should be entirely in the hands of the Bank of England. The notes should be payable in London only and should be legal tender throughout the United Kingdom.

Control of Note Issue.

As regards the control of the note issue, we make the following observations :—

(1) While the obligation to pay both Bank of England notes and currency notes in gold on demand should be maintained, it is not necessary or desirable that there should be any early resumption of the internal circulation of gold coin.

(2) While the import of gold should be free from all restrictions, it is convenient that the Bank of England should have cognisance of all gold exports, and we recommend that the export of gold coin or bullion should be subject to the condition that such coin and bullion has been obtained from the Bank for the purpose. The Bank should be under obligation to supply gold for export in exchange for its notes.

(3) In view of the withdrawal of gold from circulation, we recommend that the gold reserves of the country should be held by one central institution, and that all banks should transfer any gold now held by them to the Bank of England.

Having carefully considered the various proposals placed before us as regards the basis of the fiduciary note issue, we recommend that the principle of the Bank Charter Act, 1844, should be maintained—namely, that there should be a fixed fiduciary issue beyond which notes should only be issued in exchange for gold. The separation of the Issue and Banking Departments of the Bank of England should be maintained, and the Weekly Return should continue to be published in its present form.

We recommend, however, that provision for an emergency be made by the continuance in force, subject to stringent safeguards (recommended in the body of the report), of section 3 of the Currency and Bank Notes Act, 1914, under which the Bank of England may, with the consent of the Treasury, temporarily issue notes in excess of the legal limit.

We advocate the publication by the banks of a monthly statement in a prescribed form.

We have come to the conclusion that it is not practicable to fix any precise figure for the fiduciary note issue immediately after the war.

We think it desirable, therefore, to fix the amount which should be aimed at as the central gold reserve, leaving the fiduciary issue to be settled ultimately at such amount as can be kept in circulation without causing the central gold reserve to fall below the amount so fixed. We recommend that the normal minimum of the central gold reserve to be aimed at should be, in the first

instance, £150,000,000. Until this amount has been reached and maintained concurrently with a satisfactory foreign exchange position for at least a year, the policy of cautiously reducing the uncovered note issue should be followed. When reductions have been effected, the actual maximum fiduciary circulation in any year should become the legal maximum for the following year, subject only to the emergency arrangements previously recommended. When the exchanges are working normally on the basis of a minimum reserve of £150,000,000, the position should again be reviewed in the light of the dimensions of the fiduciary issue as it then exists.

We do not recommend the transfer of the existing currency note issue to the Bank of England until the future dimensions of the fiduciary issue have been ascertained During the transitional period the issue should remain a Government issue, but new notes should be issued, not against Government securities, but against Bank of England notes, and, furthermore, when opportunity arises for providing cover for existing uncovered notes, Bank of England notes should be used for this purpose also. Demands for new currency would then fall in the normal way on the banking department of the Bank of England.

When the fiduciary portion of the issue has been reduced to an amount which experience shows to be consistent with the maintenance of a central gold reserve of £150,000,000, the outstanding currency notes should be retired and replaced by Bank of England notes of low denomination.

Other Official Papers.

Report of the Working Classes Cost of Living Committee, 1918. [Cd. 8980.]

By way of family budgets it is estimated that the general average rise in expenditure is 74 per cent. from July, 1914, to July, 1918, and that the increase over July, 1914, was in September nearly 80 per cent. There are counter-balancing factors which do not admit of statistical measurement.

Report of the Treasury Committee on Bank Amalgamations. [Cd. 9052.]

The new type of amalgamation, union of one large joint stock bank with another similar bank, presents dangers of reduced competition, and even of a money trust, which justify some measure of Government control.

Annual Report of the Chief Inspector of Factories and Workshops for the Year 1917. [Cd. 9108.]

THERE are included reports on hours of work (becoming shortened with good effect) by G. Bellhouse; on the substitution of women and girls in industry by Miss Anderson (exhibiting the fundamental contrast—hidden by pre-war conventional views—between occupations that can be and may have to be permanent for women, and those that are preferably only temporary); on doping in air-craft (an unhealthy process), by W. S. Smith; and on trinitrotoluene poisoning, by Mr. T. M. Legge.

Fifty-fourth Annual Report of the Registrar-General for Ireland. . . . Marriages, Births, and Deaths during the Year 1917. [Cd. 9123.]

THE marriage-rate, the birth-rate, and the death-rate are each below the corresponding average for the preceding decennium. The birth-rate, 19·9 per 1,000, is the lowest recorded for Ireland. The number of births was 86,370, among which there were 10,001 twin-births and ten triplets.

Report of the Departmental Committee for Inquiring into the Principles which should Determine the Fixing of Salaries for Teachers in Secondary and Technical Schools (other than University Institutions). [Cd. 9140.] *Summaries of Evidence.* [Cd. 9168.]

AMONG other important conclusions may be noticed that which relates to the payment of lower salaries to women than to men teachers. It is pointed out that hitherto occupations other than teaching have been more open to men than to women. Also, "whereas both men and women usually contemplate marriage and the responsibility for a family, this represents a financial liability for a man which does not fall upon a woman. . . . The result is that a salary which will attract a woman will not necessarily attract a man of similar qualifications. The case of a man teacher who remains unmarried "may create a sense of hardship. . . . But until the State deliberately endows marriage or paternity, it is impracticable for such a policy to be introduced in a single service."

WAR PRICES IN THE UNITED STATES.

BEFORE the war the Federal Bureau of Labour Statistics was the chief official purveyor of prices and index numbers in the United States. This Bureau has continued to compile its widely-known series of wholesale and retail prices, and administrative exigencies have led to the organisation of two new agencies to deal with special price data.

Shortly after the Food Administration was created it set up a Statistical Division under the charge of Dr. Raymond Pearl, a distinguished statistical biologist. Among the duties assigned to this division was the collection of retail and wholesale prices of staple foodstuffs, and a few articles largely used in the production of foods, such as binder twine. The weekly reports on these subjects have been confidential, designed for the guidance of the officials in charge of the various commodity sections into which the Food Administration is divided. But the Statistical Division has issued occasional statements for the benefit of the general public—notably one statement which argued that the average increase in the country's bill for foodstuffs has been much less than the Bureau of Labour Statistics' figures show.

Scientifically the most interesting of Dr. Pearl's published reports is a bulletin entitled "General Index Numbers of Food Prices on a Nutritive Value Base." There are two of these index numbers, one made from the producer's prices of twenty staple foods, as shown in the monthly crop reports of the Department of Agriculture; the second, made from the wholesale market prices of twenty-six foods compiled by the Food Administration itself. The distinguishing characteristic of both series is that each *quoted* commodity price is weighted "in proportion to the food value, expressed in calories, of the average production of that commodity in the three years preceding the war." When the "absolute" index numbers made in this fashion are turned into relatives with the 1911-1913 averages as 100, it appears that the increase in price received by wholesale dealers has been distinctly less than the increase received by farmers. In May, 1918, the wholesale price index was 179, while the producer's price index was 218. Further, "the general level of wholesale prices of foods [in May] is fourteen points *lower* than it was a year ago, when the work of the United States Food Administration began," while producer's prices are two points higher than in May, 1917. "We see," Dr. Pearl concludes, "in the history of producers' and wholesale prices during the past year an occurrence which would, in normal times, be regarded as an economic miracle. The wholesale prices of foodstuffs have been significantly lowered while the price level for the basic food raw materials on the farm was going higher. This result has been accomplished by the elimination to a very large degree of wasteful practices and profiteering in the food distributing and manufacturing industries. The net result shows with great clearness one phase of the economic benefit which the consumer has derived from the activities of the Food Administration,

without economic detriment to the farmer." As may be judged from these conclusions, the bulletin is of lively interest to economists as well as statisticians.

In April, 1918, Mr. Edwin F. Gay, Director of the Division of Planning and Statistics, organised a Price Section, which, after a brief connection with the Shipping Board, was transferred to the War Industries Board. This Section is primarily a "service bureau," that is, it does special jobs for other Government agencies. The Shipping Board in its effort to transfer tonnage from commercial to military use, the War Trade Board in its exports-conservation work, the War Industries Board in exercising control over raw materials and manufacturing processes, the Tariff Commission and other bureaux that share in the complicated task of reorganising the country's business, call upon this Section when they need information about prices. The articles concerning which they inquire are frequently articles included in no index number—for example, casein, imported cigarette paper, light Mexican crude oil, burlap, and snuff. Further, they often require not one or two representative sets of quotations but a more or less exhaustive list. The bulletin prepared by the Price Section on rag prices, for instance, quotes eight standard kinds of rags monthly since 1913, and gives current figures on a list of thirty-seven varieties. As a result of its efforts to meet such demands, the Price Section is accumulating a large and most miscellaneous body of price quotations.

The most regular customer of the Price Section is the Price Fixing Committee of the War Industries Board. In the performance of its complicated and responsible duty this Committee draws upon the administrative officials of the Commodity Sections of the War Industries Board for technical advice, upon the Federal Trade Commission for cost studies, and upon the Price Section for market quotations running back to 1913. The articles on which the Price Section has made special reports to the Price Fixing Committee range from great staples like cattle hides and yellow pine lumber to specialities like fluor-spar, mohair, formaldehyde, and chestnut extract.

While administrative calls for data take priority over other work, the Price Section endeavours so far as it can to make systematic studies. Its chief accomplishment in this direction has been the preparation of a Book of Price Charts, including about 90 staple commodities and a few index numbers borrowed from the Bureau of Labour Statistics. The charts are reproduced upon translucent paper and so arranged that one may be laid upon

another for purposes of comparing the fluctuations of any two or three commodities. In addition, the Section is making careful comparisons between the fluctuations of prices in different countries. The English-American comparison, based upon identical lists of commodities in the two countries, has been carried far enough to justify the statement that the price level has risen since 1913-14 distinctly more in England than in the United States. Other studies under way or in prospect are concerned with those commodities whose prices have been and others whose prices have not been officially fixed, with the rise of prices in the United States during the present and the Civil War, etc. Finally, the Price Section is working upon a classification of commodities in all important branches of business with the aim of ultimately providing a comprehensive exhibit of the price phenomena that have accompanied the great upheaval.

As yet, none of the materials compiled by the Price Section have been published. As we approach the period of reconstruction, however, it seems probable that information concerning price changes will become a matter of pressing interest to large circles. There is therefore ground for hoping that the permanently valuable part of the data, including significant summaries of the general trend, may be made accessible to all economists.

WESLEY C. MITCHELL

EXTRACTS FROM GERMAN PERIODICALS RELATING TO RECONSTRUCTION.

CONTINUING his series of articles on German financial reform in *Plutus* (Sept. 11, 25) Georg Bernhard discusses the proposal for an extraordinary levy on capital (Vermögensabgabe). He notes that the levy is advocated both by representatives of the working classes, and by manufacturers, bankers, and business men in the highest tax-paying group. The Socialist championship of the levy is based on the popular principle; those able to pay taxes, *i.e.*, the rich, ought to pay. It is the same principle which for years has induced Social Democrats to support direct taxation and taxes on capital. On the other hand the rich, who in normal times have never shown any enthusiasm for direct taxation and especially for taxes on property, are in favour of as large a levy as possible on capital precisely owing to their disinclination towards direct taxation. They recognise clearly that in view of the extraordinary financial requirements of the country any future scheme of financial reform must make large demands on the richer classes, and

they prefer a levy on capital, large though it may be, to permanent taxation and to a permanent greatly increased income-tax.

The classical objections to the taxation of capital are not decisive. True, the reasons advanced by taxation theorists against actual taxation of capital which have been considered valid in the past still hold good to-day. The State has to rely on a permanent imposition of taxes, and it is a fundamental error to impose a tax which, if logically applied, will, in the course of time, destroy the source from which a permanent revenue is desired. But all taxation theorists admit that the objections to a tax on capital must be waived when the State is in danger. Then it becomes urgently necessary to bleed fortunes, and especially large fortunes. Such an urgent necessity most certainly exists in the present position of the German Empire.

Another objection to the levy on capital which has been put forward is the technical impracticability of carrying it out. Difficulties there will be, though they will, of course, be least in the case of capital in cash, Stock Exchange securities, etc., *i.e.*, "mobile" capital. But even then the difficulty would arise that, when capital is invested in securities, a dislocation of the security market might ensue when large numbers of securities were suddenly thrown upon it owing to the compulsory payment of the levy. But given the necessity of avoiding such a state of affairs this does not connote the impracticability of carrying out the levy, but means that steps must be taken to make it possible to pay the levy otherwise than in cash. It is obvious that it will not be sufficient to declare a definite sum as the amount of the capital upon which the levy is to be made, but a detailed statement will be required giving the fullest information as to the capital and its investment, which, in the case of "mobile" capital, the State might receive in payment securities selected by the taxpayer.

The simplest way of making the levy would be the surrender of war loan stock. The State would find this very much to its advantage inasmuch as this stock represents a large amount of indebtedness, and, if it guaranteed that the stock should be reckoned at par value, most holders of loan stock would be willing enough to pay the levy on capital by its surrender. The State would simply delete a sum corresponding to the stock surrendered from its debit account. Matters would not be quite so simple in the case of other securities. In all probability the State would not only receive in payment a number of diverse securities, but every taxpayer would probably try to unload securities with which he might desire to part. The State would have to reckon with being paid

to a considerable extent in securities which their possessor found it difficult to realise. The State would find it difficult at once to resell the securities, and in many cases the banks would only have been able to offer unfavourable prices, not only because they might deem the moment suitable for dealing in securities at specially low prices, but because, if the State desired a speedy sale of these, the very conditions might be engendered which it was desired to avoid. This general impulse to sell securities would result in a slump in the prices of all securities offered. Accordingly, the State would have to proceed very slowly with the liquidation of the securities handed over to it. This would probably necessitate the establishment of an Imperial Bank for the realisation of securities (Reichsverwertungsbank) to which the Imperial Authorities would transfer all the securities they received. The author proceeds to show at length, with reference to German institutions, that it would not be impracticable to deal with the securities levied.

Continuing in *Plutus* (October 9th) Bernhard discusses payment of a levy by annual instalments. He fears that the annual instalments to be levied on capital might become a permanent institution, and would accordingly take the shape of a recurring tax on capital. When once a sum thus raised has found its way into the annual budget, future Imperial Finance Ministers will have no desire to dispense with it; and long years of experience have shown Germans that even taxes which are economically injurious in their effects, although shown to be untenable, are never rescinded.

It has been proposed as a *via media* that it should be permissible to pay the levy either by instalments or in a lump sum. Those who favour this suggestion start with the assumption that the latter method of payment may encounter difficulties. There may, of course, be cases in which a single payment might prove difficult, but such cases would be extremely rare, and must be treated as exceptional, and under no circumstances should the taxpayer be given the option between paying a lump sum and by instalments, for in the latter case the complications would not be diminished but increased. If the payments of the levy were to be extended over ten years, it would, in many cases, be probable that the financial position of a taxpayer would change considerably to his disadvantage, quite apart from the fact that he would frequently attempt to lessen his liability to pay taxes, and endless protests and actions at law would ensue.

The *Weser Zeitung* (Sept. 23rd) contains a review of a book by

Dr. Grossmann, lecturer at the University of Berlin, entitled *Der Handelsboycott gegen Deutschland in französischer Beleuchtung* (French views of the commercial boycott of Germany—Nos. 5 and 6 of the series of works on "Wholesale Trade and the German Economic System," issued by the Central Association of German Wholesale Trade. Berlin : Published by Reimar Hobbing. Mk.1.20). Dr. Grossmann commences by enumerating the resolutions of the Paris Economic Conference, and points out several contradictions inherent in them. He claims that the advocates of protection in England as well as most of the English Chambers of Commerce favour a policy aimed at the economic exclusion of Germany after the war. He then goes on to discuss the question whether Germany should adopt a similar policy of exclusion or should merely regard the Paris resolutions as the outcome of a state of panic existing when they were passed. He stigmatises as most objectionable the purely commercial point of view that trade in manufactured articles invariably betokens a disadvantage to import trade, explaining his meaning by asserting that the development of German industries during the war affords Germany a sound guarantee against the paper resolutions of the Paris Conference. He quotes freely from the utterances of the well-known French economist, M. Gide, who has always held himself aloof from Chauvinism. M. Gide has asserted that the economic life of Germany cannot be dispensed with permanently by the Entente Powers and has practically admitted that "there is only one way to destroy the economic predominance of Germany and that is to do the same as the Germans, and where possible to do even better." Dr. Grossmann quotes M. Gide as having said : "Those who desire an economic war ought rather to attempt to open up the Central European market, and, should the war result in their being able to exact conditions, that would seem the first condition they should demand. From the standpoint of the economic or even the intellectual development of France, it is impossible to admit that we can be shut off from Central Europe by a wall without doors or windows against which France will always remain leaning. But it is quite impossible to make an opening from one side of the wall without leaving it open from the other side." In conclusion, Dr. Grossmann claims that the idea of an economic war even in Entente countries is by degrees becoming recognised as an economic hallucination. He considers that even in the transition period German trade will be able to count upon this fact ; with this view the reviewer finds himself unable to agree without further ado. In any case it would be a mistake, he considers, for Ger-

many not to make preparations to guard against an economic offensive by her enemies.

An article in *Der Welthandel* (Oct. 12th) discusses the prospects of the German economic system in the event of peace being concluded on the lines of President Wilson's proposals. The panic on the Berlin Stock Exchange has induced a feeling of pessimism, but the sharp fall in prices was not, the article claims, occasioned by any fears as to Germany's economic future, but was largely due to a reaction consequent upon the exaggerated prices which have obtained for so long. It would be idle to deny that the peace on President Wilson's terms will bring about momentous changes in the structure of Germany's economic system, but the production and labour of a nation like Germany cannot be dispensed with by other nations, especially at a time when a shortage of goods and manufactured articles will prevail everywhere. Coal and iron, the main props of every vigorous industry, are found in abundance in Germany, and the war has caused the importance of lignite and its by-products to win more general recognition. Germany's zinc resources enable her to employ this valuable metal as a substitute for copper and other metals, while other nations cannot dispense with the high scientific standing of German chemists and engineers. If the dreams of many industrialists as to a westward extension of Germany's iron deposits are doomed to disappointment, she has ample supplies of her own, and will also have at her disposal Russo-Caucasian ores, quite apart from those of Sweden and Spain.

CURRENT TOPICS.

THE following have been elected to membership of the Royal Economic Society :—

Arnold, S., M.P.	Law, C. A.
Boyd, H. R., O.B.E.	Lennard, R. V.
Chambers, Sir T. G., K.B.E.	Mehta, N. C. (life).
Collyer, E. W.	Mildmay, A.
Dass, S.	Morland, C. J.
Debenham, E. R. (life).	Mullens, A. L.
Howitt, H. G.	Murray, J. W. (life).
Irwin, J. W.	Nixon, J. W.
Kimitsuka, S.	Oldfield, P. J.
Kinley, Prof. D.	Pathy, C.S.K.S.
Kirk, Capt. J. R.	Pavlovsky, G. A.

Pee, C. S. (life).	Swanwick, K. ff.
Peddie, J. T.	Tilak, R.
Preater, C. J.	Ward, S. M.
Shang, S. S. (life).	Wood, H. R.
Smith, D. J.	Wolff, R.
Soward, A. W.; C.B.	Yang, C. (life).

The following have been admitted to Library membership :— Workers' Educational Association, New Zealand; Social Service Council of Canada.

FIFTEEN years have now elapsed since we announced the institution at Oxford of a Diploma in Economics (ECONOMIC JOURNAL, Vol. XIII., p. 278). The seed which was sown in 1903 has germinated; as we judge from the recent report of the Committee for Economics and Political Science. In the fourteen years 1905-18 inclusive 231 candidates have presented themselves for examination, 96 have been adjudged worthy of distinction and 99 have satisfied the examiners. Of this total of 195 who have obtained the Diploma 176 have been men and 19 women. Of 28 post-graduate male candidates who have been successful in gaining the Diploma 22 (including one Master and 21 Bachelors) have secured Distinction. A Doctor of Laws of the University of Athens, a Bachelier-ès-Lettres of Paris, a Surveyor of Taxes at Oxford, 26 working-men from Ruskin College, and 20 Rhodes Scholars have been placed in this category. Students who have received the Oxford Diploma have subsequently been appointed to professorial and teaching posts in the Universities and to administrative and other positions in the public services of this and other countries. Among such may be mentioned the Chairman of the War Trade Intelligence Department in London, the Principal of Ruskin College, Oxford, Professors of Public Administration, Economics and Commerce at the Universities of Bristol, Kansas in the United States, and Dalhousie in Nova Scotia, and the Director of Tutorial Classes in Australia. Seven at least, by the publication of independent treatises of their own, or by the contribution of important sections to books, or elaborate articles to journals edited by others, have shown that their zeal for and competence in the subjects studied for the Diploma here has afterwards been recognised and maintained. Some have pursued subsequently successful courses for the Oxford Research degrees. With reference to the problems of "reconstruction" it is justly observed that many complex affairs and hard problems require

for full survey and firm grasp more than the "little knowledge" that is proverbially "dangerous"; that a trained competent acquaintance with Economics and Political Science is indispensable both as stimulus and warning. In conclusion we read that since its foundation the institution has not received any grant from University funds. A sentence which we quoted in 1903 from a leading article of the *Times* seems still appropriate: "Perhaps the Rhodes Trustees will discover that they have power to come to the rescue. Perhaps some enlightened millionaire will find the bare *minimum* of working expenses—say £200 to £300 a year."

PROFESSOR C. H. OLDHAM, whose articles in the ECONOMIC JOURNAL for June, 1917, on *Industrial Ireland under Free Trade*, and for June, 1918, on *Changes in Irish Exports during Twelve Years*, will have been noticed by our readers, has resigned the Chair of Commerce at University College, Dublin, on his appointment to the Chair of National Economics of Ireland. This Chair had been rendered vacant by the death at the front in 1916 of the brilliant and heroic Lieutenant T. M. Kettle. Professor Oldham had discharged the duties of both chairs since 1915. His successor in the Chair of Commerce is Professor B. F. Shields, of Galway University College.

OUR correspondent Professor Achille Loria writes as follows: "With the death of Giuseppe Tonivlo, at Pisa, on the 7th of October of this year, at the age of 73, we have lost not only the eloquent and learned professor of political economy at that university, but an eminent scholar, who had devoted himself, during forty years, to the triumph of those ideas of which he was in Italy the most convinced and illustrious defender. After entering the scientific arena with a short but considered essay *On the Distribution of Wealth* (1878), he later gave to science a more important contribution in his excellent book *On the Underlying Causes of the Economic Power of Florence* (1882), in which he demonstrated in a definitive manner that the historic struggle between the Guelphs and the Ghibellins was essentially a battle between the manufacturing interest and the landed property—thus furnishing a precious document to the so-called historical materialism. Established subsequently at the head of the Christian Democracy in Italy, he developed the economic doctrines of the school in a *Treatise of Social Economy* (1897, 2nd edition 1915), a very

remarkable book, not only for its perfect acquaintance with the best political economists, but for the clear and courageous denunciation of the iniquities of the capitalistic system, the remedy of which he saw in a radical renovation of the consciences and the hearts of men. In these respects the scientific work of Tonivlo presents a very marked resemblance to that of Smart. But if we add the splendid eloquence of our countryman, which made him the most acceptable and influential orator of the Catholic party in Italy, the candour of his soul, giving him a superior impartiality of judgment in respect to the opinions and parties most opposed to his convictions, and his extraordinary modesty, failing, nevertheless, to hide his loftiness of mind, we cannot but bring a sincere tribute of sorrow to his memory, and express the hope that his great merits may serve as a lesson and example to the young generations crowding themselves into the battlefields of sociology. *Majorum gloria posteris quasi lumen.*

THE levy on capital was included among the resolutions on Reconstruction passed at the Conference of the Labour Party last June: "In view of the enormous debts contracted during the war, and of the necessity to lighten national financial burdens, this Conference demands that an equitable system of conscription of accumulated wealth should be put into operation forthwith, with exemption for fortunes below £1,000, and a graduated scale of rates for larger totals, believing that no system of taxation only of income or profits will yield enough to free the country from oppressive debts, and that any attempt to tax food or the other necessities of life would be unjust and ruinous to the masses of the people."

The Conference has no great tenderness for Capital. They "cannot help noticing how very far from efficient the capitalist system has been proved to be, with its stimulus of private profit, and its evil shadow of wages driven down by competition often below subsistence level." . . . "In the opinion of the Conference, the task of social reconstruction to be organised and undertaken by the Government, in conjunction with the local authorities, ought to be regarded as involving, not any patchwork gerrymandering of the anarchic individualism and profiteering of the competitive capitalism of pre-war time—the breakdown of which, even from the standpoint of productive efficiency, the war has so glaringly revealed—but the gradual building up a new Social order based . . . on the deliberately planned co-operation in production and

distribution, the sympathetic approach to a healthy equality, the widest possible participation in power both economic and political.

The resolutions of the June Conference may be regarded as a supplement to and development of the principle laid down in the draft report prepared for the Annual Conference at Nottingham last winter, a system which is described as resting on four pillars : (*a*) The universal enforcement of the national minimum; (*b*) The democratic control of industry; (*c*) The revolution in national finance; (*d*) The surplus wealth for the common good. The details of the edifice which these pillars support should be studied in the paper entitled *Labour and the New Social Order*, which may be obtained from the Secretary of the Labour Party, 1, Victoria Street, Westminster.

RECENT PERIODICALS AND NEW BOOKS.

The Edinburgh Review.

OCTOBER, 1918. *Commerce and Empire.* THE EDITOR. The nationalistic conception of commerce is directly provocative of war. Imperial Preference involves tariffs prejudicial to the Allies; it does not carry out the league against German "penetration" proposed by the Paris Conference. It would not act as a means of securing food for England, nor of binding together the Empire. Let us not imitate the German blend of nationality and commerce.

The Nineteenth Century.

OCTOBER, 1918. *A New Standard Price for Gold.* LANCELOT USSHER. "Whereas the standard price of fine gold is rather less than 85*s.* per oz., while gold permitted to be used for trade purposes has risen to about 115*s.* per oz.," it is proposed to alter the standard to the latter price, by the concerted action of the Allies, to the detriment of the Central Powers (who will have to buy back their gold at a heavier cost in goods). Mining would become profitable, hoards would be elicited. No one will worry about the use of more alloy in the sovereign.

The Contemporary Review.

OCTOBER, 1918. *Equal Pay for Equal Value.* MRS. FAWCETT. This principle, which is now rapidly gaining ground, affords the only way of avoiding two great evils: (1) pulling down the hardly-won male standard of living; (2) "the horrors and squalid disgrace of a sex war." The argument that men are paid more because they have families to maintain is not ignored.

Bankers' Magazine.

JULY, 1918. *Banking Amalgamations.* The arguments of the Treasury Committee (Cd. 9052) for and against amalgamation, with some additional considerations, are carefully weighed.

SEPTEMBER. *Some New Points in Banking.* SIR R. H. INGLIS PALGRAVE, F.R.S. The Nestor of British Banking keeps up his interest in new points. Referring to the July number of the *Edinburgh Review*, he locates the danger that money raised in England might be used against English interests. "Agency Bills" involve this risk. As to the service of banks to industry, it is desirable that more institutions, such as the British Trade Corporation, should be formed.

Quarterly Journal of Economics (Cambridge, Mass.).

AUGUST, 1918. *International Tariff Relations as Affected by the War.* W. S. CULBERTSON. A lucid classification and useful descriptions—in particular of the various preferences granted by divisions of the British Empire—lead to the conclusion that tariff discriminations between independent nations are not distinguishable in principle from preferential tariffs within an Empire. If the former are vetoed, the latter should be also. *Sugar Prices and Distribution under Food Control.* R. G. BLAKEY. The balance of advantage—in spite of many disadvantages—is on the side of Governmental control of the price and distribution of sugar, under present conditions. *Price-fixing in the Iron and Steel Industry.* ABRAHAM BERGLUND. The fixing of iron and steel prices has thus far shown no tendency to cause reduction of output. *Perishable Produce under Food Regulation.* W. F. GEPHART. The Food Administration, particularly the "Fair Price Interpreting Board," have stabilised prices, increased efficiency, not destroyed profits; no doubt helped by the absence of normal economic motives during the war. *The Distributive Relations of Indirect Goods.* H. J. DAVENPORT. A criticism of some laws enounced by Prof. Carver, in particular one endorsed by Prof. Wesley Mitchell that the demand for producers' goods is more sensitive to alterations than the demand for consumers' goods.

Among the notes and memoranda there is a minute criticism of Prof. Taussig's theory of international trade under depreciated paper, by Prof. J. B. Hollander; with a rejoinder by Prof. Taussig.

The American Economic Review.

SEPTEMBER, 1918. *Recent Developments in the British Labour Movement.* G. D. H. COLE. The old union of craftsmen is contrasted with the recent organisation of unskilled workers as the general labour union, "a craft union of workers without craft." The National Federation of General Workers has now a membership over 700,000. The new Labour Party—into which women and intellectuals (not exclusive classes) are admitted—includes the Independent Labour Party largely imbued with Fabian doctrines and trade unionists without any theory. The programme of the Labour Party, "Labour in the New Social Order," seems to the writer pouring new wine into old bottles. "Of freedom," he fears, "Mr. Webb has very little real conception." The writer's own ideal is "Supplanting Capitalism in the Control of Industry." The Central Labour College aims more directly at this object than the perhaps more scientific Workers' Educational Association. *The Agrarian Movement in the North-west.* JAMES G. DOYLE. *Private Colonisation of the Land.* R. T. ELY. *Historical Approach to Economics.* I. A. LOOS. *Substance and Shadow in War Finance.* C. C. PLEHN. *The Market Gauge Dollar.* D. G. TINNES.

Annals of the American Academy for Political Science (Philadelphia).

SEPTEMBER, 1918. This number is devoted to war relief work.

Political Science Quarterly (New York).

JUNE, 1918. *Bentham's Felicific Calculus.* WESLEY C. MITCHELL. A severe criticism of Bentham's utilitarian calculus, on which fresh light is thrown by extracts from Bentham's manuscripts first published in Halévy's *Radicalisme Philosophique.*

SEPTEMBER. *The Limitations of the Ricardian Theory of Rent.* W. R. CAMP. *Collective Bargaining before the Supreme Court.* T. R. POWELL.

Journal des Économistes (Paris).

AUGUST, 1918. *La quatrième Rapport de la Commission Parlementaire sur les dépenses publiques . . . en Angleterre.* A. RAFFALOVICH. Indulgence to waste incident to war is not to be construed as approval of a "politique étatiste" in peace-time. *Les Sociétés anonymes à participation ouvrière.* A. RAFFALOVICH. *Un grief des producteurs de l'or.* A. RAFFALOVICH. Referring to the complaint of Sir Lionel Phillips at the meeting of the Central Mining Corporation on the rising cost of production, but fixed price, of gold.

SEPTEMBER. *L' "Imperial Preference" et le "Patriotic Programme."* YVES GUYOT. *Les Finances Britanniques.* W. M. J. WILLIAMS. *L'évolution du Brésil pendant la guerre.* G. LAFOND.

OCTOBER. *L'industrie de la laine.* YVES GUYOT. *Contrôle international de la production de l'or.* There should be an international Commission to regulate the production of gold instead of leaving it to the play of natural influences. *L'industrie chimique français et la guerre.* A. PAWLOWSKI. *Le quatrième emprunt français.* A. BARRIOL.

Revue d'Économie Politique (Paris).

JANUARY–FEBRUARY, 1918. *Des projets d'entente financière après la guerre.* CHARLES GIDE. There is suggested a financial entente to confer an international currency on the notes issued by the leading banks—or new notes issued by a consortium of banks. Pooling the expenses of the war among the belligerent nations is too radical; and meeting them by paper money would be absurd. *Le renouvellement du privilège de la Banque de France.* G. LACHAPELLE *Les deux derniers emprunts allemands.* CHARLES RIST. *Sismondi et la condition des ouvriers français de son temps.* O. FESTY.

MARCH–APRIL. *Le régionalisme économique.* B. RAYNAUD. *Sismondi* (continued). O. FESTY. *Le relèvement des tarifs de chemin de fer en France.* M. PORTS.

Giornale degli Economisti (Rome).

JULY, 1918. *Economie Sperimentale.* V. PARETO. A profound logical study. *La politica economica postbellica dei grandi Istituti Bancari Italiani.* M. GRUNBERG.

AUGUST. *La politica dei prestiti di guerra.* B. GRIZIOTTI. *Il motivo eterno della "Terra."* G. CARANO DONVITO.

SEPTEMBER, 1918. *La politica dei prestiti di guerra.* B. GRIZIOTTI. *Calcolo dell indice ponderato dei prezzi all'ingrosso in Italia del 1910 al 1916.* C. OTTOLENGHI. A set of weighted index numbers for wholesale prices in Italy, showing, with reference to the mean of the triennium 1910–12 as base (equated to 100), a rise of general prices for 1916 to 227, and more detailed conclusion for months, and commodities, separately or in groups.

Weltwirtschaftliches Archiv (Jena).

VOL. 13, NO. 2, AUGUST 15TH, 1918. More important articles: *Probleme des wirtschaftlichen Wiederaufbaues.* PROF. DR. C. A. VERRIJN STUART. (Utrecht.) *Zur Theorie des Schutzzolles.* PROF. DR. JOSEF GRUNTZEL. (Vienna.) *Zur belgischen Frage.* DR. FELIX RACHFAHL. *Das mitteleuropaische Wirtschaftsproblem in der jüngsten Literatur.* DR. FRANZ EULENBERG.

VOL. 13, NO. 3, OCTOBER 1ST, 1918. More important articles: *Wesen und Begriff der Weltwirtschaft.* PROF. DR. B. HARRIS. [Revised reprint of an article on this subject which appeared in the first issue of this Review.] *Das Volkseinkommen Österreichs und Ungarns.* PROF. DR. A. GÜRTLER.

NEW BOOKS.

English.

CANNAN (EDWIN). Money: Its Connection with Rising and Falling Prices. London: P. S. King. Pp. 66.

[To be reviewed.]

Equal Pay and the Family. A Proposal for the National Endowment of Motherhood. London: Headley. Pp. 70. 1*s*.

[The report of a Committee formed at the suggestion of Miss Rathbone. Readers of her article in the ECONOMIC JOURNAL for March, 1917, will be prepared for a masterly statement of the contradiction between the claims of the family and the principle of "equal pay for equal work." The solution is found in the payment to *all* mothers of an endowment allowance for all—except perhaps illegitimate or over-numerous—children up to the age of five years. 12*s*. 6*d*. a week for the mother, and 5*s*. a week for the first child, and 3*s*. 6*d*. for each additional child (under five) are the payments suggested. The total annual cost of the scheme would be approximately £144,000,000. The danger to wages would not be serious.]

HECHT (J. S.). A Challenge to Economists. London: King. 1918. Pp. 43.

[The whole structure of Free Trade rests on fallacies.]

MARX (KARL). Wage, Labour, and Capital. With an introduction by Frederick Engels. Chicago: Kerr.

[A translation of articles published by Marx in the 'forties, as edited by Engels in 1891.]

NICHOLSON (J. SHIELD). War Finance. Second edition, with three additional chapters. London: P. S. King. 1918. Pp. 504.

[The additional chapters are on Bolshevism, Another Year of Inflation, The Payment of the War Debt by Taxation of Capital—all three treated as great evils.]

SMITH (E. S.). Housing: The Present Opportunity. London: King. 1918. Pp. 98. 1s.

PETAVEL (CAPTAIN J. W.). Man and Machine Power in War and Reconstruction. With Foreword by Sir Asutosh Mookerjee. Calcutta: The University. 1918. Pp. 163.

American.

ALLIN (CEPHAS D.). A History of the Tariff Relations of the Australian Colonies. (University of Minnesota Studies.) Minneapolis: University of Minnesota. 1918. Pp. 177.

ANDREWS (IRENE V.) and HOBBS (MARGARETT A.). Economic Effects of the War upon Women and Children in Great Britain. (Carnegie Endowment for International Peace.) New York: Oxford University Press. 1918. Pp. 190.

FAULKNER (HAROLD U.). Chartism and the Churches. A Study in Democracy. (Columbia University Studies.) New York: Columbia University. (London: King.) 1916. Pp. 152.

FLORENCE (P. S.). Use of Factory Statistics in the Investigation of Industrial Fatigue. (Columbia University Studies.) New York: Columbia University. 1918. Pp. 153.

GRAY (HOWARD L.). War-time Control of Industry. The Experience of England. New York: Macmillan Co. Pp. 307. $1.75.

LAUGHLIN (J. L.). Credit of the Nations. A Study of the European War. New York: Soulsner. 1918. Pp. 406. $3.50.

MILLS (F. C.). Contemporary Theories of Unemployment and of Unemployment Relief. (Columbia University Studies.) New York: Columbia University. (London: King.) 1917. Pp. 178.

ROSENBLATT (F. F.). The Chartist Movement in its Social and Economic Aspects. (Columbia University Studies.) New York: Columbia University. (London: King.) 1916. Pp. 248.

SLOSSON (PRESTON W.). The Decline of the Chartist Movement. (Columbia University Studies.) New York: Columbia University. (London: King.) 1916. Pp. 216.

SNOW (C. D.) and KRAL (J. J.). German Trade and the War. Washington: Bureau of Foreign and Domestic Commerce. Miscellaneous Series, No. 65. 1918. Pp. 236.

[A picture of German economic life in war time.]

French.

Cambon (Jules). Le Gouvernement Général de l'Algérie (1891–1897). Paris: Champion. 1918. Pp. 448.

Raffalovich (A.). L'inflation des signes monétaires et du crédit. Causes, dangers, remèdes.

Italian.

Lanzillo (Agostino). Disfatta del Sozialismo. Florence: Della Voce. 1918.

[Reviewed above.]

Spanish.

Bernis (F.). La Hacienda Española. (Biblioteca de Cultura Moderna.) Barcelona: Editorial Minerva.

[To be reviewed. Taxes as they are in Spain, and as they ought to be in view of what they are elsewhere; such is the tenor of the Spanish professor's treatise.]

Greek.

Andreades (A.). ΙΣΤΟΡΙΑ ΤΗΣ ΕΛΛΗΝΙΚΗΣ ΔΗΜΟΣΙΑΣ ΟΙΚΟΝΟΜΙΑΣ. Athens. 1918. Pp. 624.

Andreades (A.). ΠΕΡΙ ΤΟΥ ΠΛΗΘΥΣΜΟΥ ΚΑΙ ΤΟΥ ΠΛΟΥΤΟΥ ΤΗΣ ΚΩΝΣΤΑΝΤΙΝΟΥΠΟΛΕΩΣ ΚΑΤΑ ΤΟΥΣ ΜΕΣΟΥΣ ΧΡΟΝΟΥΣ. Athens: 1918. Pp. 297.

[By the skilful handling of circumstantial, though not precise, data it is elicited that the population of Constantinople was not less than 500,000, except during the seventh and eighth centuries. The wealth of the city does not admit of such accurate determination. Perhaps Chrysostom was not far wrong when he estimated the riches of Constantinople in his day at a sum equal in present money to an amount between 40 and 120 million francs, and to five times the amount in use.]

German.

Herkner (Dr. Heinrich, Editor). Die Neuordnung der deutschen Finanzwirtschaft. Second series. Munich and Leipzig. 1918. Pp. 408.

[Attention was called to the first series of these studies in the September issue of the Economic Journal. In the second series Gustav Cohn pleads for Imperial succession duties and property and income tax; Eulenburg and Jaffe consider how production may be increased in Germany; Günther inquires into the effect of taxation on small incomes; Paul Hamburger condemns the levy on capital; and Most and Schwarz furnish studies on the future of German municipal finances.]

Ettinger (Dr. Markus). Die Vermögensabgabe und Konjuncturgewinnsteuer im sozialen Zukunftstaate. Vienna and Leipzig. 1918.

[A very full survey of the opinions in favour of and against the capital levy, with a consideration of the influence of *post-bellum* taxation on economic activities.]

GRUNTZEL (DR. JOSEF). Wirtschaftliche Begriffe. Vienna. 1918. (Alfred Hölder.)

[Particularly full on the problem of capital.]

JUNG (DR. AUGUST). Die staatliche Elektrizitäts-Grossversorgung Deutschlands. Jena. 1918. Pp. vi + 121.

[Argues in favour of a State monopoly of electricity supply.]

MANES (DR. ALFRED). Staatsbankrotte, wirtschaftliche und rechtliche. Berlin. 1918. (Karl Siegismund.)

MEHRING (FRANZ). Karl Marx. Geschichte seines Lebens. Leipzig. 1918. Pp. xii + 544.

PRION (DR. W.). Die deutschen Kreditbanken im Kriege und nachher. Stuttgart. 1917. Pp. 165.

VOGEL (DR. E. H.). Die Theorie des volkswirtschaftlichen Entwicklungsprozesses und das Krisenproblem. Vienna and Leipzig. 1917. Pp. x + 400.

[A thorough study of crises.]